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AUDUBON MAGAZINE

A BI-MONTHLY MAGAZINE DEVOTED TO THE PROTECTION AND PRESER-VATION OF OUR NATIVE WILDLIFE

Our Motto: A BIRD IN THE BUSH IS WORTH TWO IN THE HAND

Contributing Editors

ARTHUR A. ALLEN FRANK M. CHAPMAN ALAN DEVOE LUDLOW GRISCOM LOUIS J. HALLE, JR. MARGARET BROOKS HICKEY JOHN KIERAN ALDO LEOPOLD ROBERT CUSHMAN MURPHY DONALD CULROSS PEATTIE ROGER TORY PETERSON HERBERT RAVENEL SASS GEORGE MIKSCH SUTTON EDWIN WAY TEALE

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Roger Tory Peterson A House Wren at home in the Roosevelt Memorial Sanctuary (Page 272).

LAND-USE AND DEMOCRACY

We must prove that democracy can use its land decently. This brilliant article presents a new strategy for conservation education and the citizen's war to save the land.

ONSERVATION education appeared, before December 7, to be making considerable headway.

Now, against a background of war, it looks like a milk-and-water affair. War has defined the issue: we must prove that democracy can use its land decently. At our present rate of progress we *might* arrive at decent land-use a century or two hence. That is too little and too late.

Conservation education, in facingup to its task, reminds me of my dog when he faces another dog too big for him. Instead of dealing with the dog, he deals with a tree bearing his trademark. Thus he assuages his ego without exposing himself to danger.

Just so we deal with bureaus, policies, laws, and programs, which are the symbols of our problem, instead of with resources, products, and landusers, which are the problem. Thus we assuage our ego without exposing ourselves to contact with reality.

The symbols of conservation have become complex and confusing, but its essential reality has the devastating simplicity of the needle's eye. If we don't like the way landowner X is using the natural resources of which he is owner, why do we buy his products? Why do we invest in his securities? Why do we accord him the same social standing as landowner Y, who makes an honest attempt to use his land as if he were its trustee? Why do we tell our government to reform Mr. X, instead of doing it ourselves? The answer must be by ALDO LEOPOLD either that we do

not know the limits of what government can do, or that we don't care deeply enough to risk personal action or danger.

When the Audubon Society killed the millinery feather trade in 1913, what was its real weapon, the prohibitory law or the refusal of intelligent women to buy wild bird plumage? The answer is plain. The law was merely the symbol of a conviction in the mind of a minority. That conviction was so strong and unequivocal that it was willing to risk direct action, danger of ridicule, and even danger of mistakes to achieve the common good.

I have no illusion that all of the products of land-abuse are as easy to identify, or as easy to do without, as a wild bird-skin on a hat. I do assert that many products of land-abuse can be identified as such, and can be discriminated against, given the conviction that it is worth the trouble. Conversely, the products of good land-use can often be singled out and favored.

Back now to education: who is to be educated? By tacit consent it is the coming generation; we have only to teach them why and how to act. Here is the dog again, addressing the symbol, walking around the problem instead of facing-up to it.

"Children are like grown-ups: they understand what others do better than what others are saying. Unless the grown-up world shows itself willing to practice conservation, that practice will be hard for the younger genera-

tion to adopt."
With these two sen-



Sail Conservation Service

Landowner Y makes an honest attempt to use his land as if he were its trustee.

tences, Paul Sears demolishes the "let posterity do it" school of education.

There is lacking only a simple formula by which we, and posterity, may act to make America a permanent institution instead of a trial balloon. The formula is: learn how to tell good land-use from bad. Use your own land accordingly, and refuse aid and comfort to those who do not.

Isn't this more to the point than merely voting, petitioning, and writing checks for bigger and better bureaus, in order that our responsibilities may be laid in bigger and better laps?

Such an approach may be implemented with cases that present an intellectual gradient suitable for all ages and all degrees of land-use education. No one person, young or old, need feel any obligation to act beyond his own personal range of vision.

For example, a case visible to all who ride and read: does a good American shave with soaps that plaster rock and rill with signs, hiding bad manners behind a barrage of puns? Can

the legislature abate this nuisance while the voter rewards its impudence with his custom?

Again, a little less obvious: does a good American accept gifts of stolen goods, or credit scores made by cheating? To wit: ducks bought from the pusher, or refrigerated beyond the legal date? Venison hung up by the guide? Wildflowers pilfered without consent? Can society prevent by law what it condones by social usage?

A little harder: Does one buy Christmas trees that should have been left to grow? How does one tell trees representing legitimate thinnings from trees representing exploitation and robbery? Both are for sale; neither is labeled. Could they be?

Up a step: Dairy X buys milk from steep eroding pastures, which spill floods on the neighbors, and ruin streams. It also buys milk from careful farmers, and mixes the two, so that conservation milk is indistinguishable from exploitation milk. What should the conscientious buyer do? What can

If we don't like the way landowner X is using the natural resources of which he is owner, why do we buy his products? Why accord him the same social standing as landowner Y? Why tell our government to reform Mr. X, instead of doing it ourselves?



the careful farmer do? Could farmers form pools to regulate their own pasture practices, as they now regulate butterfat and bacteria?

Still harder: Lumberman X claims to practice forestry. His boards are necessarily knottier than those offered by lumberman Y, who is still skinning the illimitable (?) woods where rolls the Oregon, and hears no sound save his own dashings. Which board do you buy? Should you buy the honest board, even at a higher price?

Simple, but really tough: Should one accept pay for doing the decent thing to land, as most landowners do when the AAA pays them for lowering their ratio of corn and cotton to legumes and grass? If this is defensible for a year, is it for a decade?

Again: Newspaper X buys its paper from a sulphite mill which turns its wastes into the river that moves in majesty. All other mills do the same, and all other newspapers. Each editorial on conservation sends its additional spurt of offal into the public waters. Your cousin draws his paycheck from the mill, and your brother draws his from the newspaper. "There ought to be a law"; in fact there is a law, but it is not enforced; it can't be. An extra penny for each newspaper would pay the cost of reclaiming the offal, and thus break the whole vicious circle. Whose penny is going to break it? How? When? Has this anything to do with the struggle between democracy and fascism?

Finally: Nearly all American wheat is the product of exploitation. Behind your breakfast toast is the burning strawstack, feeding the air with nitrogen belonging in the soil. Behind your birthday cake is the eroding Palouse, the over-wheated prairies, feeding the rivers with silt for army engineers to push around with dredge and shovel, at your expense; for irrigation engineers to fill their dams with, at the

expense of the future. Behind each loaf of (inedible) baker's bread is the "ever normal" granary, the roar of the combine, the swish of the gang-plow, ravaging the land they were built to feed, because it is cheaper to raise wheat by exploitation than by honest farming. It wouldn't be cheaper if exploitation wheat lacked a market. You are the market, but transportation has robbed you of all power to discriminate. If you want conservation wheat, you will have to raise it yourself.

These are samples of the easy, the possible, the difficult, and the insoluble realities of conservation, presented as problems for the citizen. Education, so far, presents them only as problems

for his agents.

When the ecologist sees any given force at work in the animal community, he can safely predict that it will operate only up to the length of its tether, after which some other force will take over.

Conservation is our attempt to put human ecology on a permanent footing. Milk-and-water education has convinced people that such an attempt should be made, and they have told their government to act for them. Some other force must now persuade them to act for themselves.

Money-minded people think they are acting when they pay taxes. This hallucination, during the "defense" period, nearly cost us the war. It will cost us our natural resources if we

persist in it.

To analyze the problem of action, the first thing to grasp is that government, no matter how good, can only do certain things. Government can't raise crops, maintain small scattered structures, administer small scattered areas, or bring to bear on small local matters that combination of solicitude, foresight, and skill which we call husbandry. Husbandry watches no clock,

knows no season of cessation, and for the most part is paid for in love, not dollars. Husbandry of somebody else's land is a contradiction in terms. Husbandry is the heart of conservation.

The second thing to grasp is that when we lay conservation in the lap of the government, it will always do the things it can, even though they are not the things that most need doing.

The present over-emphasis on game farms, fish hatcheries, nurseries and artificial reforestation, importation of exotic species, predator control, and rodent control is here in point. These are things government can do. Each has an alternative, more or less developed, along naturalistic lines, i.e., management or guidance of natural processes. Research shows these alternatives to be, in general, superior. But they involve husbandry, which government can do only on its own lands. Government lands are a minor fraction of our land area. Therefore government neglects the superior things that need doing, and does the inferior things that it can do. It then imputes to these things an importance and an efficacy they do not merit, thus distorting the growth of public intelligence.

This whole twisted confusion stems from the painless path, from milk-andwater education, from prolonging our reliance on vicarious conservation.

The end result is that ideas once wholly beneficial begin to boomerang on the user, a clear sign, to the ecologist, that some new adjustment is in order. A case in point is the idea of sanctuary. Sanctuaries and refuges have done enormous good; we would have kept few rare species without them; but for them shootable waterfowl would surely have disappeared. Yet on every hand are signs that we expect too much of them. Most public forests are now shrinking or abolishing their refuges because excess deer



U. S. Forest Service

Lumberman X claims to practice forestry. His boards are necessarily knottier than those offered by lumberman Y, who is still skinning the illimitable (?) woods. Which board do you buy?

and elk, in the absence of natural predators, have become a scourge to the forest and to themselves. Some national parks are being eaten up, and have no recourse except to shoot or to shrink; a pair of sharp horns for any park man to sit on. Many notably successful sanctuaries are now ringed by commercial shooting "clubs"; there is a grave question whether the birds would not be better off without both the sanctuary and the clubs. When administration is in the hands of politicians who care more for votes than for birds, there is not even a question.

Why these kickbacks? The answer, I fear, is that sanctuaries are one of the things government can do, but the growth of private ethics and naturalistic management needed to go with them is beyond the powers of government.

It seems to me that sanctuaries are akin to monasticism in the dark ages. The world was so wicked it was better to have islands of decency than none at all. Hence decent citizens retired to monasteries and convents. Once established, these islands became an alibi for lack of private reform. People said: "We pay the bills for all this virtue. Let goodness stay where it belongs, and not pester practical folks who have to run the world." The present attitude of some duck-hunters offers a close parallel. The more monasteries or sanctuaries, the grimmer the incongruity between inside and outside.

We need more sanctuaries, but some of them will boomerang until they serve a better public. This is particularly true of deer and elk sanctuaries which are too big, duck or goose sanctuaries choked in a noose of limitshooting clubs, or any sanctuary deprived of its natural predators.

One of the curious evidences that "conservation programs" are losing their grip is that they have seldom resorted to self-government as a cure for land abuse. "We who are about to die." unless democracy can mend its land-use, have not tried democracy as a possible answer to our problem.

I do not here refer to such superficial devices as advisory boards, who offer their wisdom to others, or such predatory devices as pressure groups, who exist to seize what they can. I refer rather to social and economic units who turn the light of self-scrutiny

on themselves.

NRA was perhaps a start toward responsible self-scrutiny in industry, but the Supreme Court snapped the rising grouse before he ever got above the alders.

The present Soil Conservation Districts are perhaps a start toward selfscrutiny in farming, but they dare not use their powers for lack of voter-support. These districts are self-governing farm communities which have set themselves up as legal entities. In many states the district is authorized to write land-use regulations with the force of law. So far they dare not. But if farmers once asked: "Why don't we tackle our own erosion-control? I'll pull my cows off the hill if you will." the machinery for action is at hand.

Farmers do not vet ask such rash questions. Why? Probably because they have been led to believe that CCC camps, AAA checks, 4-H clubs, extension, meetings, speeches, and other subsidies and uplifts will do the trick. Those who really know land know this is not true: these milk-and-water measures have indeed retarded the rate of soil-loss, but they have not reversed it. Thus we see that the painless path not only fails to lead us to conservation, but sometimes actually retards the growth of critical intelligence on the whereabouts of alternative routes.

No new device in human affairs is ever an unmixed blessing. The idea here proposed: hitching conservation directly to the producer-consumer relation, instead of to the government. entails some serious risks. It would

Behind your breakfast toast are the over-wheated prairies, feeding the rivers and reservoirs with silt which must be dredged at your expense.

Farm Security Administration



Farm Security Administration

Dairy X buys milk from steep eroding pastures . . . and from careful farmers. It mixes the two, so that conservation milk is indistinguishable from exploitation milk. What should the conscientious buyer do?

present the professional advertiser with an opportunity for euphemized deception and equivocation vastly larger than cigarettes. The more complex the product or process, the wider the field for the trained hoodwinker.

This brings us to the real and indispensable functions of government in conservation. Government is the tester of fact vs. fiction, the umpire of bogus vs. genuine, the sponsor of research, the guardian of technical standards, and, I hasten to add, the proper custodian of land which, for one reason or another, is not suited to private husbandry. These functions will become real and important as soon as conservation begins to grow from the bottom up, instead of from the top down, as is now the case.

Conservation is a state of health in the land-organism. Health expresses the cooperation of the interdependent parts: soil, water, plants, animals, and people. It implies collective self-renewal and collective self-maintenance.

When any one part lives by depleting another, the state of health is gone. As far as we know, the state of health depends on the retention in each part of the full gamut of species and materials comprising its evolutionary equipment.

Culture is a state of awareness of the land's collective functioning. A culture premised on the destructive dominance of a single species can have but short duration.



The Nature of Things

By
Donald Culross Peattie



T'S come at last! Bambi, the most famous deer in literature. Bambi the most beloved children's classic written in recent years, now capers, fawn and buck, upon the motion picture screen of thousands of neighborhood theaters. Bambi, awaited with tremulous excitement by several million American youngsters, comes to life, by means of Walt Disney's incomparable literary-dramatic-graphic art. To millions who never buy and seldom read a book like Felix Salten's story, Bambi now becomes a sacrosanct person. To millions of children who have not yet learned to read, Bambi leaps to life; with one spring he plumps all four little hooves right in the center of our hearts, be we young or old.

But some of the most vociferous of the organized sportsmen of the country are up in arms. The September number of Outdoor Life carries an article by editor Raymond J. Brown, entitled "Outdoor Life Condemns Walt Disney's Film Bambi As Insult to American Sportsmen." More, Mr. Brown has set in motion all the mechanized forces at his command, to arouse the American sportsman to the danger in which this picture has placed him. In his own words, Mr. Brown has appealed to "a long list of sportsmen and conservationists whom Outdoor Life can reach by mail. These include the rod-and-gun editors of the principal newspapers of the United States, the presidents of approximately 5,000 sportsman's clubs, all manufacturers of sports equipment, and the heads of the various state and federal fish-and-game conservation agencies." It's a powerful party machine; and indirectly it probably does hook up a large part of the claimed fifteen million sportsmen of America.

The joker, for the sportsmen, is that this machinery of public opinion, which was used effectively against the National Audubon Society to bore holes in the hull of feather legislation, has now encountered not a machine. or an organization of any sort, but something infinitely stronger, something that can fly like air-power where a machine can only rumble like a tank. For the machine is up against an art-and an art implemented as no art has ever been before, to reach even those who can't or don't read; it is reaching the 115,000,000 people who aren't hunters. It is tapping the emotional resources of even the unimaginative, so that for the first time they are putting themselves in the place of the hunted, just as Uncle Tom's Cabin put the unimaginative in the place of the slave.

Now, the objection of Mr. Brown, and the other voices which he has encouraged to rise in protest against the film of *Bāmbi*, is based primarily on alleged misrepresentations about the American hunter. Although Felix Salten's book was not concerned with the American hunter, and though all Disney's films are known to be fanta-



Allan D. Cruickshank
The moving picture, "Bambi," has awakened a new sympathy for wildlife everywhere.

sies, something in the indictment of deer hunting which this picture inevitably creates, has convinced the editor of *Outdoor Life* and some others, that Disney is talking about them.

Specifically, their charges are (a) Bambi's mother is killed by bullets from an unseen hunter, which cut off her life right in the midst of its happiness; (b) she is shot in spring, which is out-of-season in America; and (c) a hunter tries to round up the game by setting fire to the forest, and the horrible effects of fire are shown in the film. Mr. Brown asks if anyone has ever heard of such atrocities in America. He asserts that it can't happen here. He wanted Disney to insert a preamble stating that such things don't happen here. Mr. Disney has not done so.

I wonder if the reason why he has not pulled his punches is that Disney knows some of the same facts that I happen to know about deer hunting. In my neighborhood, the Forest Service men have been horrified many times to find the woods full of maimed, dying, and dead but unretrieved does and fawn. There are only two possible explanations: either the hunters who shot them cannot tell does and fawns from ducks, or they don't give a damn. On which charge would Mr. Brown prefer to defend these mighty Nimrods? He would answer of course that he wouldn't defend them at all: he would condemn them. Well, that is just what the film of Bambi does.

True, spring hunting is not practiced much, because the law can so easily detect such a law-breaker. However, to the hunted deer it can probably make little difference whether he lays down his life in spring or fall. And the impact of the film would have been the same on the audience whether the death of a deer had taken

place against a background of spring greenery or autumn splendor.

To take up the use of fire:-that too is illegal. But I can only report that the day that the deer season opens in Walt Disney's state of California, the mountains begin to burn. They burn on, here and there, until the rains come. I have long questioned whether all those fires are the result of smokers' matches. At any rate, the only year when deer hunters were not allowed in the forests, on account of the war. there were no fires. So, whether deliberately set or not, the fires that accompany hunters are correctly portrayed by Bambi, in all their shocking effects.

The Audubon Society has never criticized hunters who obey the hunting laws. It has, however, for almost half a century, used its influence, through its Junior Clubs, to foster in children a love of nature and a sympathetic understanding of wild life. Speaking only for myself, I would hazard the guess that the National Audubon Society, both among its officers, and by referendum to its constituency of membership, would endorse Bambi, as heartily as Outdoor Life deplores certain of its features.

However, our endorsement is not needed. The message of Bambi is sweeping the country; it is appealing above all to the men and women of tomorrow who are now our children. To a child, in his simplicity, the life of an innocent, harmless, and beautiful animal is just as precious as that of a human being, so many of whom do not appear altogether innocent and harmless and beautiful. Children are enraged by the violation of their kingdom when such animals are slain. legally or not. They simply cannot understand how a deer slayer can say, as Mr. George J. Stobie, Commissioner of Inland Fisheries and Game of Maine.



American nature is always there to be enjoyed by the cross country tourist.

says in a counterblast to *Bambi*, that sportsmen do everything possible "to better the lot of wild things." I reminded one child that the sportsmen often feed the deer through the winter. Said the child: "The witch fattened up Hansel, too." Odd, the way the kids' minds work, isn't it?

KKK

A young woman, a refugee from Germany, writes me that she is about to leave Maine where she had taken up residence, for St. Louis where her husband has found a job. And as this will be her first cross country trip, she wants to know what to look for of interest on the way.

"But-please," she begs, "-not graveyards or poets' houses."

Bless you, sez I in reply, nobody outside New England and possibly Charleston, S. C., would think of showing you a graveyard as a prime attraction. As for poets' houses, they're rare west of Concord. Most of the poets born outside New England are

still alive and unhallowed, so they can't charge admission to their homes, though some would do it, I'll wager, if they thought there was any movement in that line of merchandise.

When I tried to tell her about the cities and towns through which she would pass, I was obliged to recall that to a European almost no American cities have fascination, and few American villages have charm. To the Middle Western tourist Boston may seem quaint and old; it does not produce that impression on the trans-Atlantic visitor. I recall that as I approached New Harmony, Indiana, last year I felt a definite thumping of the heart, so excited was I by visiting at last the scene where Thomas Say and Robert Owen once lived and worked and dreamed. The curious houses built by the Rappites interested me beyond my expectations. But German peasant architecture in a transposed and now run-down version wasn't likely to excite my German friend.

So I gave up on American civilization and told my friend that she must enjoy it not for its antiquity but for its modernity. People who search out quaint towns and picturesque old houses—and which one of us hasn't done it?—are really hungry for Europe, with a natural hunger for our cultural

origins.

But I recall that this past spring, when motoring across the continent, my eyes were opened to the true beauty of the American small town when I was crossing Kansas. You could tell from afar off when a town was coming, because out of the vast sea of the prairie there would rise a cluster of grain elevators, their concrete cylinders shining in the morning light or against a sky black with an afternoon thunderstorm, which announced a settlement. And I thought that never had I seen anything more beautiful. Stonehenge on the downs near Salisbury is no fairer and-except on the score of antiquity-no more impressive. What the cathedral spire is to a European city seen from afar, the grain elevator is to a Middle Western town. You're so sure which you prefer, are you? Well, admittedly the church feeds the soul-of its believers. The golden grain, gathered from the Kansas soil, stored in these white concrete temples to Ceres, and baked as the shining loaf, will feed the sinner of Main Street as well as the saint, the wise virgins of Kansas and the foolish ones. Not wholly un-Christian, that.

My refugee friend's real difficulty, I discovered, was not what she should see but how she was going to see anything, on a trip from Maine to St. Louis for which only about four days of motoring time was to be allowed. Knowing her as a keen appreciator of nature, I would have liked to say that by no means must she miss the alpine

gardens on Mount Washington, New Hampshire. That she must stop for cider from the apple orchards of the Finger Lake District. I'd tell her, if it were any use, to cut south, into the Pennsylvania hills, just to see the grand old stone barns. I'd tell any traveler that central Kentucky has every right to call itself the heart of America, for a sweeter spot I never saw. Nor a fairer river valley than that of the Ohio.

I would have liked to talk about the ancient beach trees of the west slopes of the Alleghenies. Listen, I would have said, for the Whitethroat Sparrow's autumn song. Stop to hunt for little tart wild plums in the dusty thickets; and there should be blazing-star lighting up the pastures with its tall purple spires. You may even see a heron if you motor by the moon, stalking the fields, these nights, for mice in the harvest stubble. And I'd gather king nuts in southern Illinois, just for the sake of their rich sweet kernels.

But-what use? All that is strong and quiet, all that is best and lovable in American nature, is invisible to

those who must hurry.

I could, however, give my friend one piece of advice for the speeding motorist-an almost extinct species-a sort of read-and-run suggestion. And that was that she invest in some of the really remarkable new state guide books, in the American Guide Series. I feel that Americans have scarcely begun to appreciate these books, and if I could afford it I would buy all 48 of the state guides as quickly as they come off the press, and a lot of the city guides too. Last spring I motored from Washington, D.C., to Santa Barbara and I picked up these vade mecums in the principal states through which I passed. How far they are from the cut-and-dried guide book you may judge from the fact that the account

of the town of Bend, Oregon, for instance, contains a considerable biography of its late lamented citizeness "Klondike Kate." Under Tombstone, Arizona, there is a racy description of the famous and infamous Bird Cage Theater, which never closed its door day or night, served whiskey throughout the performances, and saw shooting frays between the rival majesties of the law as presented by the sheriff and the marshal, who had it out from their boxes on opposite sides of the stage.

Every naturalist will want the books in this series which cover the region where he lives or takes the field. Even for the information on hours and days when natural history museums are open, they are valuable to a travelling naturalist. But some of the geologic and biologic paragraphs are truly remarkable in their pithiness. In the Colorado book, for instance, I found the best brief account of the paleontology of a portion of the planet's crust, which I remember to have read anywhere. Perhaps the very brevity helped. I find that a hundred pages of Upper and Lower Jurassics, and pteridosperms and megatheriums put my head in a whirl. But the authors (each book is the work of many anonymous collaborators) when compelled to get their science into four or five pages written for the laity, have had to clear up in their own minds just what is most important; they have had to make the sequences clear and they have had to produce a visible thread of that which is biologically meaningful.

A while ago a friend sent me from Maine a newspaper account of a form of hunting that I had never heard of before: wing-shooting bats. Let me quote the record:

"It is developing some pretty fast

wing shots among the local Nimrods, and it is proving a boon to ammunition dealers. It requires fast, accurate gun-pointing to hit a darting, twisting bat in semi-darkness, but the nightly blitzkriegs of the Minot bag brigade along the Little Androscoggin River have noticeably lowered the population of the winged mammals . . . The fast-flying, bird-like creatures were made to order for shotgun training . . . etc."

Now it may be that by this time war conditions have completely stopped this sport. So we'll let pass that remark about its proving a boon to ammunition dealers and that other about bats being made to order for this sort of thing. We'll admit that there is probably no law that protects these highly beneficial, gentle creatures, which are not edible; nor, surely, can their little corpses make trophies of which a big man could feel much pride. There is no law, either, which prevents a man from making a fool of himself.

But it is obvious that the National Audubon Society, or somebody, needs to do a little more work along the banks of the Little Androscoggin. The trouble came long ago, in the primary education of these sportsmen. Correctly educated, a boy starts out with an eager curiosity about animal life, which he understands he can seldom satisfy by putting that life out, like a light. The desire to kill something is not or is only very slightly normal in a boy; it has to be trained before it appears to him as fun. But newspaper pictures of the Battle of the Bats on the Little Androscoggin showed men teaching boys how to wing bats with scatterguns.

If this can be taught, it is possible also to teach a boy that when he shoots his animal friends, he is not

too bright in the upper story.

The Roosevelt Memorial Bird Sanctuary Today



I F YOU have ever wondered how to develop and maintain a sanctuary, visit the Theodore Roosevelt Memorial Bird Sanctuary at Oyster Bay, and see for yourself how it is done! Here

is a guide. Here is a place to which you can come and obtain ideas to take home and put to work on your own land or in your own community. In these days of stress and uncertainty, a

bird sanctuary is a haven for man and for lesser creatures alike. Many another spot can be made like this one a place where you and your neighbors may observe the eternal workings of that natural world which is the basis of man's life here on earth; a place where you may linger while your spirit is refreshed.

The 12 acres, at Oyster Bay, Long Island, were donated to the National Audubon Society by W. Emlen and Christine Roosevelt in memory of their cousin, Theodore Roosevelt, to be maintained as a bird sanctuary forever. Unlike monuments of marble, this sanctuary is animate-a living memorial to a great man. Through it the Society endeavors to educate the public as to the conservation beliefs which he expounded so persuasively. In its influence, it is one of the most far-reaching of all of the sanctuaries maintained by the National Audubon Society. It demonstrates ways and means of attracting more birds to any average plot of land, such as your back-yard, suburban grounds, farm or country estate.

It lies in the midst of the most thickly populated area in the United States, within easy reach of millions of city inhabitants. Some 15,000 people annually visit the memorial fountain in the sanctuary, and as many as 450 have been counted on a record day. These visitors hail from nearly every state in the Union and from 18 foreign countries. The educational features attract many school children; 43 classes were personally guided and instructed by the Society's resident warden within a recent period of six weeks.

This model sanctuary is managed not only for the protection of birds and other wildlife within its boundaries, but for the education and enjoyment of the public. It is not a haven for rare birds threatened with extinction, but for the familiar birds of town and country, the birds that bring a homey cheer and happiness into the everyday lives of men.

In nature, the vegetation is constantly changing; growth and shade become more dense; sun-loving plants, including many berry-bearing shrubs that offer food for birds, are crowded out. The Society has, therefore, undertaken to control to some extent the progressive change. Some of the tangle and undergrowth is cleared out for paths and openings are made in the midst of the woods to let in sunlight and create habitats that are congenial to and increase the density of the bird nesting population.

To the 28 kinds of trees found on the property in 1924, there have been added 28 other varieties. Fifty different kinds of shrubs have been planted, increasing the total number to 66 varieties. These additions were made with an eye to their usefulness to birds, both because of food producing qualities and nesting cover values.

That this management has borne favorable results is proved by the fact that eighteen years ago only 14 different species of birds nested in the sanctuary. Recently as many as 31 species have nested here within a single year, and 39 in all have bred within the area. The total number of kinds of birds observed in the sanctuary from 1924 to date was 149. The conditions within the sanctuary have been so favorable to nesting birds that an excess population has been produced and has overflowed onto neighboring lands.

Let us enter the sanctuary and follow the curving woodland trail, which leads into a world of green tranquillity. First we come to the memorial fountain, with its nine-foot bronze group of children, birds and mammals sculptured by Bessie Potter Vonnoh and symbolizing the perpetual youth of nature. The birds come to bathe and refresh themselves in the cool waters and spray of the fountain, and recognize as part of their domain the curtain of trees and shrubs surrounding the fountain and separating the main area of the sanctuary from the distractions of the outside world.

Beyond the fountain stretches the nature trail, clothed in grass and lined with benches, nesting boxes and bathing pools. Side trails lead from it here and there to connecting paths and thick retreats where birds make their homes. Attractive labels, in keeping with the surroundings, help you identify the vegetation and describe its usefulness from a sanctuary view-

point. There are native oaks, cherries, tulips, walnuts, sassafras, black locusts and conifers. Between the larger trees grow flowering dogwood, mulberry, mountain ash, silverthorn, inkberry, viburnum and honeysuckle, offering an abundance of food and shelter.

You see bird nesting boxes everywhere. These are of simple construction and are carefully placed, having in mind the kinds of birds to be attracted, the nearby vegetation and its density, the amount of sunlight and natural control of small predators.

Late spring is the very best time to visit the sanctuary. Thrushes, flycatchers, warblers, woodpeckers and many other birds are abundant, on the wing, in the trees, searching the ground for

Robins, unlike shy warblers, like to bathe in formal, exposed pools.





Allan D. Cruickshank
Dense thickets make an ideal habitat
for Brown Thrashers.

food, or splashing about in the shallow concrete pools. Dogwood and apple blossoms blend with the fresh green of the maples and the darker green of the oaks. The bright yellow of the forsythia is fading as the new green leaves emerge, and the handsome magenta blooms of the red-bud are hastening to reach maturity before the rains of late spring brush them off the twigs. Nest building has already begun, and here and there a vociferous Robin or pugnacious Catbird challenges invasion of its territory by another of its kind. Chipmunks scurry busily through the brush piles; squirrels dart along low-hanging branches, and occasionally a garter snake is seen stretched out on a sun-bathed bush, straightening the kinks of his long winter hibernation.

In late June and July, the foliage thickens; tangles of briars, vines and shrubs develop, providing ideal cover for the breeding birds. A little later these same thickets shelter the many young birds as they clamor for the worms, grubs and berries painstakingly gathered by their parents. Through the hot, sultry days of late July and August, the birds are quiet, and hasty searching by the observer will reveal few; a quiet wait beside one of the pools will prove more rewarding than a dash through the trails.

From late August on, a marked reduction in bird population is apparent, fledglings disperse to seek their own food and the southward migration begins. Before the sharp cold of winter sets in, the fountain pool is drained and the unheated nature museum closed. The stillness of the woods is broken by the friendly call of the Chickadee, and brightened by the plumage of the Blue Jay. The nuthatch queries nasally as he seeks food previously cached. During the winter months the feeding boxes and shelters are well patronized, and an ample supply of seeds and suet is provided for avian residents and visitors.

At the left of the main trail, well hidden in the shrubbery, is a simple nature museum, equipped to serve as a key to the sanctuary. Information, with samples of the vegetation and with pictures of the birds of the sanc-

tuary, are attractively exhibited in this museum. An electrically operated model of the sanctuary in miniature greets visitors at the museum entrance. It portrays the sanctuary in dogwood flowering time, with trees, shrubs, pools, fountain group, brush piles, trails and buildings. Elevations and dimensions are built to scale. The four basic types of habitat and the nesting kinds of birds are coordinated and portrayed by the mere pushing of a series of electric buttons. Another fascinating exhibit is the electric migration chart, showing the fly-ways followed by the birds of the sanctuary when winging back and forth to and from winter quarters to the south.

The planting, the trimming, the clearing, the cutting of the grass, the maintenance generally, including that of buildings, takes time and money. Through a cooperative arrangement, the Youngs Memorial Cemetery and the Roosevelt Memorial Association have given encouragement and mate-

rial assistance. The directors and members of the Bird Club of Long Island have always had a great interest in this sanctuary, and in recent years this club has very generously assisted the Society in meeting the costs of maintenance. The sanctuary has but a tiny endowment of \$1,000.

But this is no measure of the sanctuary's influence or of the amount of work, thought and devoted care that is put into it by the resident warden, James Callaghan. He, with his own hands, has built the improvements. It is he who guides the public through the sanctuary, makes and maintains the trails, attends to the planting, the building, and management of the nature museum. With his help, the National Audubon Society has been able to develop the educational work of the sanctuary far beyond the limits the endowment would normally permit, and to demonstrate to increasing thousands of people ways to attract and enjoy birds.

A cement-lined bath at the edge of a brushy thicket attracts Catbirds.



A BIRD BY ANY OTHER NAME

By Roger Tory Peterson

Can anything be done about the inconsistency in bird-names?

THE grass in other pastures always seems greener. When we turn the pages of a handbook on the birds of some distant part of the world, we are at once intrigued by the names. They seem to have color and flavor that ours lack. We learn, with surprise, from Jack Jones, who writes on Australian birds in this issue, that "Australians are envious of the many apt and picturesque names that have been given American birds." He bemoans the fact that Australian birds do not have more attractive names. He quotes a newspaper columnist who illustrates the difficulties confronting the Australian poet in the writing of verse with a local touch:

Sweetheart, we watched the evening sky grow pale,

And drowsy sweetness stole away our senses,

While ran adown the swamp the Pectoral Rail,

The shy Hypotaenidia philippinensis.

Dear, all the secret's ours. The Sharp-tailed Stint

Spied, but he will not tell-though you and I

Paid Cupid's debts from Love's own golden mint,

While Yellow-bellied Shrike-Tits fluttered high.

The Honeyeaters heard; the Fuscous —yea,

The Warty-faced, the Lunalated, too;

But this kind feathered tribe will never say

What words you said to me, or I to you.

That day our troth we plightedblissful hour,

Beginning a joy a whole life long! And while the wide world seemed to be in flower,

The Chestnut-rumped Groundwren burst forth in song.

Sitting at this end of the world, we have always admired the exciting and interesting Australian bird names. Thumbing through Neville Cayley's "What Bird Is That?" we find: Shining Starling, Satin Bower-bird, Golden Whistler, Boobook Owl, Winking Owl, Jacky Winter, Noisy Friar-bird, Peaceful Dove, Welcome Swallow, Blue Bonnet, and Rainbow Lorikeet. And what could be more arresting than Laughing Kookaburra or Laughing Jackass! On the whole Australian birds would seem to us not badly named at all and we hasten to inform Mr. Jones that some of our American birds struggle under very inappropriate names.

Our Ring-necked Duck should have been called Ring-billed Duck because the dull chestnut neck-ring can rarely be seen. The Olive-backed Thrush is olive only by vague tendency. The Green Heron has little green in its plumage; the orange of the Orange-crowned Warbler is dull and concealed; the White-necked Raven shows no white except when desert winds ruffle the neck and breast feathers, revealing the white bases. The Whistling Swan does not whistle, nor does the Screech Owl screech. The Upland Plover is no plover but a sandpiper.

The Tree Sparrow is not typical of trees and, as is well known to those who keep feeding trays, Evening Grosbeaks are rarely seen after noonday.

Many birds were named after the locality where the first specimen was collected; hence we have the Philadelphia Vireo, which is rare around Philadelphia, the Cape May Warbler, which is equally rare at Cape May; and the Connecticut Warbler, which goes through Connecticut in small numbers in the fall but cannot be called typical of that state. Many birds have been given the names of obscure naturalists, and some, like the Blackburnian Warbler and Anna's Hummingbird, were named after people who had not even this distinction.

Almost everyone's first interest in birds is in identifying them; distinguishing one species from another, and fastening names or handles to them. Birds that have long been familiar to men have received dozens of colloquial names. The Pintail Duck has more than 26 names, while the Flicker has 125.

The need for having one recognized or official label is evident; that, of course, was the original idea behind the use of scientific names. Such names, patterned on the dead languages, are uniform throughout the world. Naturalists also saw the need for official vernacular names in each language. When a bird was already well known. a name already in wide popular use was retained. Such names have more flavor than those created out of whole cloth by scientists. The ornithologists of yesteryear were an unimaginative lot, and the names they invented often were based on taxonomic characters that seemed curious to them, but which totally fail to describe the bird to the layman, for whom these "common" names are intended. As a result we have Downy Woodpecker, Hairy Woodpecker, Rough-winged Swallow, Sharp-shinned Hawk, Rough-legged Hawk, Semipalmated Plover and others.

Ornithology in Australia is more recent than in this country, where the study has been going on for well over 200 years. Although Mr. Jones observes that many Australian birds are worthy of more appealing names, he believes that worthwhile names will arise of themselves as appreciation of wildlife develops in Australia.

It is doubtful whether we shall be able to do much about our own poorly named birds. The names are much too intrenched in usage now. New names are suggested frequently, however. One of the most recent writers to stick out his neck in this way was Samuel A. Eliot, Jr. In "Birds of the Connecticut Valley in Massachusetts," he suggested a number of changes. Unfortunately, many of Mr. Eliot's names would prove no more satisfactory than the old ones. Black and White Warbler has always seemed to me a perfectly good descriptive name for that bird, but Mr. Eliot proposes "Scrannel," because the bird's uniqueness is suggested by this archaic dictionary-word which is "applicable to weak reedy songs, such as the thin song of this species . . . and suggests other words appropriate to the bird like scrimshaw, scrawl and scramble."

For the Nashville Warbler, he suggests "Ashy-coif." Even though this is descriptive, most people would have to go to the dictionary to learn what a coif is. The same goes for the Hooded Warbler, which he would call the "Wimpled Warbler," because its black head marking is not truly a hood. He proposes that the Western Tanager be called Wing-barred Tanager; this is all right from a local Connecticut Valley viewpoint, where the Scarlet Tanager is common and the Summer



Why not call this bird Ring-billed instead of Ring-necked Duck?

and Western Tanagers are rare possibilities, but the name would have no meaning at all throughout most of the bird's normal range in the West, where it is the *only* tanager. And why the perfectly well-named Yellow-bellied Flycatcher should be changed to Yellow Flycatcher I cannot see.

All of us would like to see some bird names changed, but most of these whims only add to the general confusion. However, even at this late date, some reforms still might be accomplished. At a time when the whole world is going through violent revolutionary phases, a little sound revision of bird names does not seem too radical.

Why not reinstate some of the old names of the birds of prey? Originally the word "hawk" had a very definite meaning. It meant a birdeating bird, and to this day, in England, only those birds of prey that feed primarily on other birds, are called hawks; species similar to our Sharp-shin, Cooper's and Goshawk. The others are known as kites, buzzards, eagles, falcons, harriers and Osprey. The early Colonial settlers haphazardly applied these names to birds they found here. Our vultures they called buzzards, whereas in England, buzzards meant the Buteos,

species similar to our Red-shouldered and Red-tailed Hawks. Our Buteos, in their turn, were called hawks, as were the falcons, harriers and Osprey.

In our country, the word "hawk" is now completely synonymous with all birds of prey and carries with it the bird-eating implication. It would be a real step forward in the protection of some of these raptores if the old names of their old-world counterparts could be revived: Peregrine Falcon instead of Duck Hawk; Kestrel instead of Sparrow Hawk: Merlin for Pigeon Hawk and Harrier rather than Marsh Hawk. To change the name "buzzard" might be unwise since it has been thoroughly corrupted to mean vulture, and carries a not too favorable connotation. However, there would be no great difficulty in getting used to the other four names. Dr. Walter Spofford, an ardent falconer, proved this in Tennessee, where, due to his efforts, many of the ornithologists now use Peregrine, Kestrel and Merlin. If the people of central Tennessee could get used to these names in a year or two, surely such a change could become effective throughout the country. An official source of bird names, such as the A. O. U. Check-List, would have to take the initiative.

This would be no radical step, but rather a conservative move, since it would be a return to original English names. The conservationist would approve, as it should then be easier to put across legislation protecting these birds. Much legislative effort has been stymied in the past because of an unsympathetic reaction to the word hawk.

We do not expect the authorities to change the names of species simply to suit our whims, but something should be done to standardize subspecific names. They are in a mess, as every western bird student knows. As things stand now, the name of a subspecies does not always indicate to which species it belongs. All Song Sparrows are called Song Sparrows, i.e. San Diego Song Sparrow, Atlantic Song Sparrow. This is fine. On the other hand, however, one of the races of the Savannah Sparrow is called Bryant's Sparrow. This immediately suggests to the beginner that it is a distinct species, quite different from the other Savannah Sparrows. It is as if we simply called the Atlantic Song Sparrow, Atlantic Sparrow. There would be nothing in the name to tell us that it was just a Song Sparrow after all, and virtually indistinguishable in the field from other Song Sparrows.

The extreme examples are the western jays. The several races of Steller's Jay are designated by such totally unrelated names as Black-headed Jay, Long-crested Jay, Blue-fronted Jay and Coast Jay. The various races of the California Jay are known by such names as Nicasio Jay, Long-tailed Jay, Woodhouse Jay, Texas Jay. The inference is that there are eight or ten kinds of jays to be dealt with instead of two. The poor vernacular naming of subspecies has, I believe, been the greatest single drawback to popular interest in western ornithology.

It is quite easy to settle on an inclusive species name in most cases. To the average westerner, the Willow Woodpecker or Batchelder's Woodpecker is still just a Downy. The A. O. U. Committee has planned to adopt official vernacular names to cover each species in the new Check-List. which is now in preparation. We hope they will go farther, and give more uniformity, also, to subspecific names. Some years ago, Dr. Joseph Grinnell. championed this idea, but got nowhere. Others feared that the resulting names would be ridiculous and unwieldy.

Granted, there are some knotty problems. But shall we drop the idea because of a few difficult examples? Let us see what some of these are: one of the races of the California Jay is known as Texas Jay. Applying the subspecific name to the specific name we have Texas California Jay. That does not work. Similarly, one race of Lincoln's Sparrow is known as Forbush's Sparrow. A combination results in Forbush's Lincoln Sparrow. Actually one has to look quite hard for such ridiculous examples. They demand individual treatment, or maybe left just as they are: Texas Jay and Forbush's Sparrow. Those who cite these examples as excuses for a donothing policy are purists at the expense of being practical. Since vernacular names are designed for the layman, they should be understandable to him. To add another word or two may make a name more cumbersome but more useful: such as Bryant's Savannah Sparrow or Wayne's Blackthroated Green Warbler. The tendency of the field student would then be to drop the subspecific prefixes. So long as such names as Bryant's Sparrow and Wayne's Warbler are floating around, there will be no uniformity in the use of bird names.

A THRASHER TALKS HIS WAY TO FAME



Can birds of the mockingbird family mimic the human voice? Jerry, the first conversational thrasher to be heard from to date, answers the question.

By Marie V. Beals

Photographs by the author

LET your neighbors know that you are a real bird-lover and, sooner or later, you will hear about every bird in distress for miles around. No telling how many new and interesting experiences await you just around the corner, nor what small "discoveries" you may make to add to the growing accumulation of bird facts useful to science.

It was on a bright July day that a

telephone call brought two tiny Brown Thrashers into my life. "What shall I do with these two baby birds I have found on the ground?" asked the voice at the other end of the wire. "Why just bring them over to me," I replied.

That was the beginning of my intimate friendship with Tom and Jerry, so christened by my husband; and the beginning of an association which has brought many happy hours to the



Beals family, and to the lives of Tcm and Jerry Thrasher, too, I believe.

Although I have been a bird-watcher since I was a small child, I have never approved of captive, caged birds as pets. My joy has always been in making my garden so attractive to birds that they will come and share it with me of their own free will. I have given much attention and thought to planting berry-bearing bushes, fruit trees and vines. Pans of fresh water are always placed at strategic spots throughout the garden. During the past twenty years almost every species of passerine bird that uses the Atlantic flyway has visited my garden, including such difficult-to-see species as Bicknell's Thrush, Gray-cheeked Thrush, Cape May Warbler, Prothonotary Warbler, Alder Flycatcher, Saw-whet Owl, Eastern Mockingbird, and Philadelphia Vireo, and I have banded more than 108 species. Among those birds that have nested in the garden are Robins, Catbirds, Flickers, House Wrens, Starlings, Song Sparrows, Redeyed Vireos, Northern Yellow-throats, Purple Grackles, Wood Thrushes, Redeyed Towhees, Yellow-billed Cuckoos, Blue Jays, and Brown Thrashers.

Brown Thrashers usually avoid the immediate haunts of man, but they have nested with me ever since my shrubbery thicket became dense enough to suit their taste. Their nests are usually low in the bushes or on the ground.

Thrashers are native to the American continent only, and of the 14 species, only the Brown Thrasher is an eastern bird, breeding in southern Canada and in the United States east of the Rockies. Although an occasional Brown Thrasher spends the winter in my neighborhood, the favorite wintering ground is from southeast Missouri and North Carolina, to central Texas and Florida.

The tiny fledglings were almost lifeless when I received them. Their eyes were still unopened, but they had strength enough to beg for food. I put them in a berry box lined with woolen cloth. I fed them every fifteen minutes for several days. Small bits of moistened whole wheat bread, pieces of earthworm, wireworm, meal-



worm, milliped, blueberry, cherry, and a very small quantity of hamburger made up the menu; while Vitamin D, in the form of a drop of cod-liver oil was the "pick-me-up" with which they began each day. The food was placed well down in their throats so that their swallowing muscles could function.

When their eyes began to open and their feathers to grow, I moved them to a canary cage. Jerry slept on the perch. Tom's right leg was afflicted, so he slept on the floor. Jerry had an affliction, too; his bill was crossed. When he was old enough to pick up food for himself, I kept the tip of the two mandibles cropped, shortening them about an eighth of an inch every three months.

When their tails were full grown, each bird was given his own cage made of half-inch wire mesh, 3' x 2' x 2'. Notches were cut in the perches in Tom's cage to support his weak leg.

In clear weather, they spent several hours each day in an outdoor wire enclosure. Here they passed the time in sun-bathing and in hunting for food—tossing aside dead leaves on the ground to find bugs and earthworms or catching insects on the wing. Their sun-bathing was a sight to behold—with bills wide open and a wild stare in their eyes, they sat on the perch lifting their feathers and turning and twisting, so that full rays of sunshine touched all parts of their bodies.

Part of our daily routine was "indoor exploration." The signal for this adventure was for me to open the cage doors. The two birds hurried out and began to fly through the house as if some wild spirit had suddenly taken possession of them. Under chairs and tables they went, over the sofa and across the desk. They cut corners and darted from here to there with a speed that made a mere human dizzy, but never once, during their daily dozen, did they collide with anything.

Nothing escaped their notice. Was a wrapped package private property? I should say not! They soon had the string pulled off, the wrapping punched and torn, so that bits of paper floated through the air. When the doorbell rang, they reached the door first; when the telephone rang,

they flew to the table where it stood.

They were endlessly inquisitive about me. They flew to my head when I entered the room, pulled out hairpins, tugged at my hair, pecked at my nose, investigated my ears and poked their bills into them. Their favorite game was to have me drag a piece of paper, tied to a string, across the floor. They would chase it the way kittens do, snatch it in their bills, and toss it into the air.

When they were six weeks old they gave their first call—a loud smack. A couple of weeks later, they sang for the first time; the singing continued all winter, a low medley of sounds which became louder as spring approached, and by May both were in full song.

During spring migration, when Brown Thrashers began to appear in my garden, Tom was released (May 7). He stayed in the garden all day, mingling with others of his kind. I saw him last around six o'clock that afternoon when he sat in a shrub near the kitchen window, calling and scolding. The next morning all the thrashers were gone—and with them, Tom.

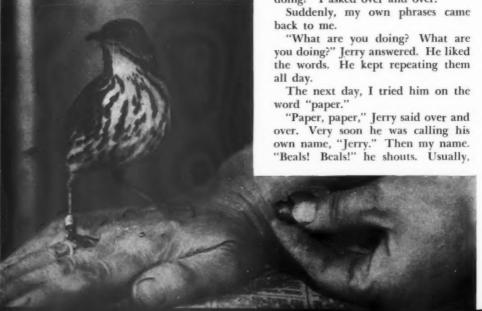
On May 12, Jerry was released. He,

too, stayed in the garden all day, answering my call and alighting on my hand for mealworms. After a thunderstorm the next day, he seemed to disappear. For two days I called for him with no result. On the afternoon of the second day, I found him in one of the shrubs, looking chipper as you please. He held a red cherry in his bill-one which I had placed in his dish in the garden. He dropped the cherry, flew to my head, and clung there as I entered the house. He chattered happily, pulled at my hair and came tumbling down with it. I opened a window to see what he would do. He flew to the sill and began to sing, but in a few minutes was back on my head. Then and there, I decided to keep him.

Now had come the opportunity to try out a theory which I have long entertained, that is, that members of the mockingbird family (to which thrashers belong) have the ability to mimic human conversation just as they have the ability to mimic the songs of the bird world.

One day when Jerry was on the sunporch, I called to him from an adjoining room.

"What are you doing? What are you doing?" I asked over and over.



he repeats a word twice, sometimes three and four times. "Goody, goody, goody," he says, and "Peter, Peter, Peter, Peter."

His vocabulary now consists of 90 individual words, and an extensive repertory of phrases or sentences.

Strawberry, blueberry, cheese, peanut, mealworm, radio, birdie, naughty, hurry, quick are common words with him. Sometimes he says "Sleepy," and "Oh, dear!" Or "All right," "Stay there," "This way," "Pretty Jerry," "It's raining," "Peek-aboo," and "A and P." He calls my brother, Santo, "Santo-to-to!"

He imitates the songs of the Redwing, Baltimore Oriole, Northern Yellow-throat and many others, and pronounces such names as Chewink, Bobwhite, Phoebe, Killdeer, Whip-poorwill and Pewee. He loves the word "busy" and repeats it many times during the day, with inflection and interrogation: "Busy, busy, busy?"

Jerry sings and talks every day in the year except during the moulting period from the end of July until the end of August. May, June and July are the months when he "displays." He perches on the chandelier or on a shelf in the bathroom and even on the floor, tilts his spreading tail high into the air, holds his wings upright, and lowers his head until his bill touches the floor. In this attitude, he struts along, mumbling curious sounds and fluttering his wings. Then he flies off and sings very loudly, exclaiming "Marie's right here," "Watch out," "Pretty Jerry," . "Hello, Jerry."

I have consulted a number of ornithologists about the talking habits of thrashers, among them Dr. Frank M. Chapman and Dr. Robert Cushman Murphy of the Museum of Natural History, and Dr. Lee S. Crandall of the New York Zoological Society, but so far have found no one who has

heard of a conversational thrasher. Can it be that Jerry has taught us all something new about thrashers?

For seven years, Jerry and I have been chums. He does not resent the other members of the family but he does not respond to their approaches as he does to mine. He repeats only the words and sentences spoken by me, using my intonations and inflections. In the morning, he flies upstairs to my room to greet me. If I pretend to be asleep, he perches on the footboard of the bed and says softly, "Lazy bones," "How do you do?" "Wake up!" If I am awake, he perches on my hand and touches the fingers repeatedly with his bill, uttering low gurgling sounds and fluttering his wings. Then, suddenly, he straightens up and points his bill toward the ceiling. I have often wondered if wild thrashers greet each other in this fashion in the early morning?

The finger-caress which he gives me in the morning is the same greeting he gives when I return to the house after an absence of a few hours and put my hand on or in the cage. No other member of the family is so honored. As I type this story, Jerry is squatted on the table and he has just said to me, "How do you do?" and touched my fingers with his bill. But I believe I know why he is hanging around the typewriter. He is waiting for me to leave—so that he can pull the ribbon out!

Jerry has been both my friend and teacher. He has taught me much about bird reactions and bird ways. He has given me many hours of pleasure, and brought a cheerfulness into our family life that we all appreciate. But what a care, you say? True, Jerry keeps me busy finding food for him, but I am repaid for all my trouble, because Jerry never forgets to say: "Thank you. Thank you."

From the land of kangaroo and kookaburra comes this vivid account of birds and conservation.

BIRDS OF AUSTRALIA

By Jack Jones

Member of Royal Australasian Ornithologists' Union

N INE thousand miles separate you, the American, from me, the Australian. A tidy distance, when numbered in miles; but no distance at all when your radio is by your side. One twist of the dial brings you a voice from Australia with your morning coffee.

A common language and common ideals have always bound us together. Now the ties are closer still with hundreds of "Yanks" here to fight beside us, while you think of us every day as you read dispatches from General McArthur's headquarters, or eagerly await the arrival of letters postmarked "Australia."

So far you may have heard more about our attractive Australian girls, than about our birds, marsupials, trees and flowers, or conservation problems. I want to tell you something about this land where the kangaroo actually hops; where the Tasmanian devil and the duck-bill platypus are something more than mere creations of nature-fakers; where the flightless emu roams the plains and breaks down farmers'

fences, proving that it is more lively than a mere "three-letter bird" in an American crossword puzzle! The cassowary, also large and flightless, is at home here. While lyrebirds, bowerbirds, mound-builders, cockatoos, honeyeaters, and kookaburras are real flesh-and-feather creatures, and not just pictures in a natural history book!

This astonishing native "zoo" of ours lives in a plant world vastly different from yours, although many Americans have become familiar with that "naturalized Australian" of your West Coast, the eucalyptus tree. Over here we move against a vast background of eucalyptus. These "gum" trees, almost 400 species of them, come in all shapes and sizes, from tiny bushes to giants of the forest. Many of our wattle trees (acacia to you) are indigenous to our continent only, for we have more than 750 species. Giant tree-ferns-mere fossils to you-are part of the living green of our landscape. Our plant and animal associations are



Fairy Penguins making their way from the sea to their breeding burrows. Phillip Island, Westernport Bay, Victoria.

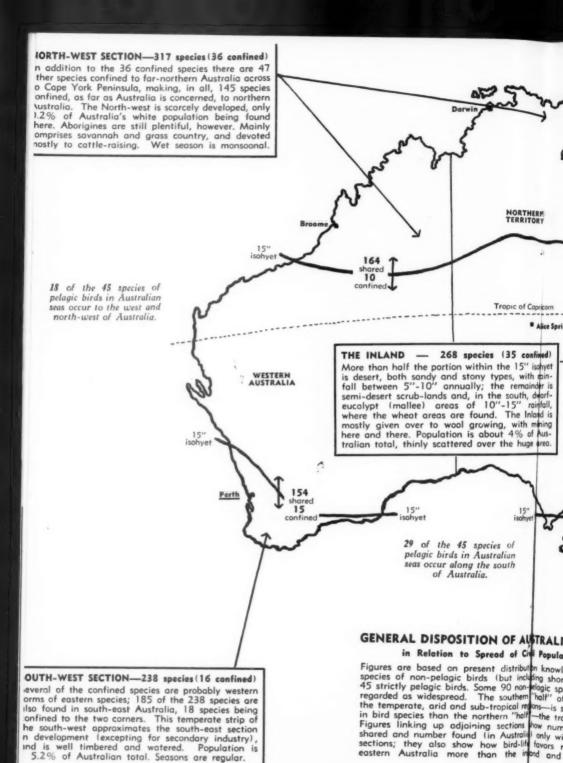
so closely knit, that many animals are unable to survive if removed from their native habitat. Past attempts at collecting animals for zoos in foreign lands, have ended in such dismal failure, that it is now against the law to collect certain species for this purpose. This means that you will someday have to visit Australia if you insist on seeing a living koala, that charming little "teddy bear" whose life seems to dependent upon a diet of *fresh* eucalyptus leaves.

The American bird-watcher who knows well his water-birds would soon feel at home here, for many of our species are identical with yours, or closely allied. It is among our landbirds that you will find the greatest divergence, for the list includes many not found in North America, such as: emu, cassowary, mound-builders, fruitpigeons, Pratincoles, Stone-curlew, Bustard, lorikeets, cockatoos, Frog-

F. Lewis

mouth, rollers, bee-eaters, lyrebirds, Pittas, scrub-birds, flycatchers (Muscicipidae), Song Shrike, Magpie-lark, Crested Shrike, Cuckoo Shrike, figbirds, log-runners, quail-thrushes, babblers, chats, thornbill-warblers, woodswallows, Mistletoe-bird, Pardalotes, sunbirds, silver-eyes, honeyeaters, weaver-finches, orioles (Oriolidae), Drongo, Shining Starling, Apostlebirds, catbirds, bower-birds, rifle-birds (birds of Paradise), bell-magpies and Crow Shrike.

It has been claimed that the bowerbuilders are the most extraordinary group in the world. The bowers are made of sticks and twigs, and are sometimes a few inches in length and height, sometimes many feet. According to the species of bird, the bowers or "playgrounds" are decorated with bleached bones, coral and snail-shells, feathers, broken pieces of glass and other glittering objects, orchids and other fresh flowers, fresh leaves, berries, green moss and ferns. The Satin



The Peninsula is, ornithologically, the richest area in Australia. Civil population is 3.5% of Australian Cape York total, mostly engaged in fruit and sugar-cane growing near the coast; little secondary industry. The greater portion is savannah woodland and grass downs, with pockets of tropical jungle rain-forest on the coast (as shown on map); these pockets have strong affinities, botanically and zoologically, with New Guinea, and it is in the rain-forest that, for Australia, most of the 62 confined species are found. Wet season is monsoonal (up to 140 ins. on coast). 246 shared RTHERM 47 confined 140 29 of the 45 species of pelagic birds in Australian c of Capricorn seas occur to the east and 238 north-east of Australia. Alice Springs 39 confined 5 confined) 15" isonyet , with min-remainder is QUEENSLAND outh, dwarf-5" rainfall, Brisbane he Inland is with mining 1% of Aus-SOUTH AUSTRALIA huge area. 193 shared) 16 confined 15" Adelaide F AUTRALIAN BIRDS of Cial Population istribution knowledge of 630 at including shore-birds) and 0 non-elagic species may be outhern "half" of Australia— SOUTH-EAST SECTION-393 species (73 confined) Among the 73 confined species, 13 are confined to Tasmania, 1 to Victoria, 2 to N.S.W., and 10 to coastal southern Queensland. About 87% of Australia's population of 7,000,000 live in this area, ical resons—is slightly richer "half—the tropical region. ctions how number of birds custralial only within the two pird-lift favors northern and the inand and south-west. 45% in the four capital cities. Here, too, are the major mountain and river systems and the greater portion of the forest area of the continent; also most of the small-farm area, and almost all secondary II. industry. Seasons are regular, i.e. not monsoonal.

BIRDS OF AUSTRALIA

CAPE YORK SECTION-362 species (62 confined)

289

Bower-bird has a distinct liking for blue, and often "paints" the bower walls with this color, producing the stain by squashing berries in its bill.

All bower-birds are excellent mimics. Since they are fond of cultivated fruit, however, they are quickly destroyed near settlements and need sympathetic publicity to prevent a dangerous reduction among certain species. Remote habitat is their best protection

at present.

Our lyrebird, famous the world over for its lyre-shaped tail, has a magnetic attraction for all Australian birdwatchers. The male struts on dancing mounds, which he builds in the ferngullies of the forest, displaying a tail of shimmering beauty. The forest rings with the sound of his powerful voice, his concerts consisting of a range of calls all his own, as well as mimicry of other birds and of man-made sounds. American bird-lovers will be glad to know that the Superb Lyrebird is plentiful in its mountain habitat and is in no danger of extinction; no decent Australian would kill one, and the birds themselves appear remarkably proficient at avoiding foxes and surviving bushfires.

Less spectacular-looking birds, but with habits of unusual interest to the ornithologist, are the Jungle Fowl or Megapode, the Brush or Scrub Turkey and the Mallee Fowl. These moundbuilders incubate their eggs in huge nests of sand or earth, leaves and other debris scratched up into small hillocks by the birds. Heat is generated by decaying vegetable matter or, as in the case of the Mallee Fowl whose nest is of sand, by direct solar warmth, and the birds are said to control the temperature by opening and closing the top of the mounds according to the time of day or the weather. The Scrub Turkey is said to test the temperature by inserting its bare head and wattle

into a hole scooped into the heart of the mound. In stormy weather, the Mallee Fowl will thatch its closed-up mound with heavy sticks to prevent wind and rain erosion. The young of all three are nidifugous and release themselves from the mounds which may be from 4 feet high to 12 feet wide, in the case of the Mallee Fowl, or as large as 15 feet high by 80 feet wide, as with the Jungle Fowl, depending upon the number of birds using the nest, and the number of years in use.

Easy-to-see birds

Certainly no American soldier has escaped acquaintance with our magpies. Until recently I lived near one of the large receiving camps and noticed that the magpie population increased by about 400 per cent. Camp scraps, of course, were the attraction. but for the bird-minded boys in that camp the Black and White Magpie (Gymnorhina hypoleuca) and the Black and White Magpie-lark (Grallina cyanoleuca) must have been an interesting sight, for they are the tamest and most obvious of the native birds which are seen about city parks and open spaces.

No matter at what point Australia is entered, one or more of our 59 species of the brilliant and rowdy cockatoos and parrots may be seen, and we're not stingy with them either. True, one or two of the parrots have not been reported for years (no observers in their localities), but most of them are plentiful. The parrots are either gayly colored or predominantly greenish-hued with some brilliant contrast feature such as red or yellow patches. As they customarily fly about in small flocks, the bird-watcher is often thrilled with the flashing pictures they present. Our eleven "Cock-



not displaying, the tail is carried in a trailing position, like a pheasant.

R. T. Littlejohns

Male Superb Lyrebird on dancing mound, with tail fully spread. When

ies" range from white to black, each with some contrasting feature.

The kookaburra, or "Laughing Jackass," is readily seen in parks and gardens in eastern and southern Australia. His idiotic laughter, disliked by many people, gives this large king-fisher his name.

Among the honeyeaters, the Regent, Red-headed and Scarlet, are notable for their beauty. The honeyeaters are the largest single group in Australia, totalling over 60 species, small and large, drab and gorgeous, and all with the badge of their family—a brushtipped tongue for scooping nectar from the flowers of the eucalypts.

Many of our "wrens" are common

birds. These warblers (Sylviidae) are found all over Australia, but were called wrens by early colonists because of their cocked-up tails. The mature males are gems of color. The White-winged Wren is violet, except for white wings; the Red-backed Wren is black, with a flaming scarlet saddle; the Purple-backed Wren has head and back of purple-blue, a black throat and chest, and chestnut wing-patches.

Enormous field for bird study

Of our 707 species of birds, there are many of which scarcely anything is known of life-history and economy. As far as I am aware, in the whole of

the sparsely settled north of Australia —from above Cairns to the east, to Shark's Bay on the west—there is not a single resident recording bird-observer; and in this area are about 430 species, approximately 150 of which are confined there.

The majority of recording birdwatchers reside in the state capitals or provincial cities, while the remainder are scattered throughout the eastern and southern portions.

Until the end of the nineteenth century, very little concerted field study took place. In 1901, the Royal Australasian Ornithologists' Union was formed, gradually raising the status of ornithology here and regularly producing its journal, *The Emu*. Our nearest approach to an organization such as the National Audubon Society is the Gould League (named for John Gould, that professional

ornithologist, whose "Birds of Australia" is part of his illustrated folio of birds and other animals of various parts of the world). The membership is limited to school children. The League is very active in three states, but we hope it will soon become a national body and broaden its scope.

Our migratory problems are interesting, but have scarcely been investigated. Whoever becomes the Frederick O. Lincoln of Australia will certainly have a fresh field in which to work.

Exploitation of natural resources

We, like you, face various conservation problems as a result of exploitation of the land. In the first century of settlement, many valuable timber stands were destroyed, both for farming purposes and for lumber. Intensive grazing and overstocking of sheep

The Mallee Fowl is about the size of a small hen turkey.



and cattle has caused wind-erosion problems, and the clearing of much of the mallee (dwarf-eucalypt) section in southern Australia for growing wheat has given us a dustbowl problem. The flora and fauna associations of this mallee region form one of the wonders of Australian wildlife. Although mallee-frequenting birds have suffered considerably, there are still large areas left that are not likely to be disturbed.

The last great period of exploitation of land resources occurred as a postwar outcome after 1918. Immigration and closer settlement of demobilized men was extensively encouraged. However, the rise of industry during the past twenty years has caused a dwindling of land settlement—small farmers have been drifting to town where better wages and shorter hours are theirs for the taking.

As you can see by a study of the map on pages 288 and 289, there is a rainfall belt which almost encircles the continent and where most of our 7,000,000 people live. The portion of the continent lying on the other side of the 15" rainfall line, or isohyet, is sparsely populated and no doubt always will be. Although Australia is as large, or larger, than the United States, it is unlikely that we can ever support a population anywhere near your 130,000,000. It has been estimated that, at present standards, Australia could support no more than 20,000,000 people.

Effect of settlement on wildlife

The precise effect on wildlife of 170 years of development is difficult to assess. Observers and their records are

Closed-up incubating mound of the Mallee Fowl. The mound is composed almost entirely of sand.



few enough now, but in early days were almost non-existent. From what early information we have, however, it appears that species of birds rare today have always been so. The only birds definitely proved extinct since settlement are two insular forms of the emu in Tasmania and Kangaroo Island; but two others—the Noisy Scrub-bird of the Southwest, and the Paradise Parrot of the Interior—are thought to be extinct.

The retreat before settlement of birds and mammals is very obvious, but the mammals have suffered most; some races are seemingly extinct, others much rarer than formerly, and all are pushed back into remoter areas. Introduced predators—the Red Fox (Canis vulpes), and feral cat—are here a factor.

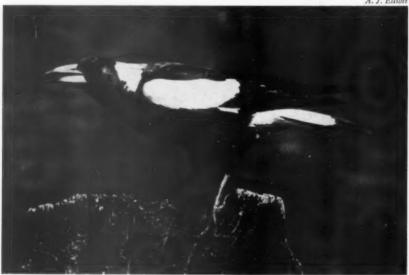
The complete clearing of much of the limited sub-tropical jungle scrub of coastal New South Wales and southern Oueensland, and present day clearing of limited tropical jungle scrubs of coastal Queensland, for fruit and sugar-cane growing, is confining to ever-narrowing pockets quite a number of tropical birds found nowhere else in Australia.

Inland, sheep raising offers a good deal of competition for bird life. In this section, however, enormous rookeries of herons, egrets, cormorants and pelicans, totalling many thousands of birds, are likely to occur wherever a major flood has guaranteed a year or so of suitable conditions in the billabongs and lakes. Ducks, too, will concentrate in terrific numbers on such flooded Inland areas, especially after a few months of breeding. Really major floods, however, occur only thrice or so in fifty years in this region.

Introduced birds have caused competition for native species. Thirteen species of introduced European and Asiatic birds, including the Starling and Sparrow, have successfully estab-

Black-backed Magpie in a fighting attitude. Magpies are aggressive, but are the best known and most popular of Australian birds.

A. J. Elliott





Commonwealth Government
Budgerigars or Shell Parrots flocking at a Northern Territory water-hole.

lished themselves about our large cities, towns and cultivated regions. Not enough is known to pronounce judgment on the economic value of these species, but because of displacement of native birds, no more introductions would be tolerated.

Conservation in Australia

Public interest in conservation is sympathetic but easy-going, much of the infringement of laws being due to ignorance. The Commonwealth has little control over forest, water, soil and wildlife resources, except in the Northern Territory. For the most part, conservation management is in the hands of inadequately staffed state game departments. A heartening feature of Australian conservation is. however, that a good foundation is available upon which to build. Unprotected species of birds and other animals are few, areas of sanctuary and refuge are increasing, and the true National Park concept is gaining force.

There is close government control

of riparian rights, so that pollution of streams by injurious industrial wastes and untreated sewage has never been permitted. The disheartening feature is that ambitious projects for wildlife conservation are still considered luxuries, and very little public money is available for research or for adequate administration of national parks and preserves. An Australian Fish and Wildlife Service is still very much of a dream.

Australian conservationists are very conscious of our undirected efforts, and profoundly interested in American conservation. In the battles being waged against pressure groups, in the planning and carrying out of programs, and in the growth of remedial measures in North America, we have a ready-made answer to many of our problems.

Taken on the whole, the status of our birds, with some few exceptions, appears satisfactory. The fear lies in what could happen if conservationists do not forestall further habitat destruction. That's where the American lesson can be driven home.



The Director Reports to You



MORE than once we've tried to tell you about our wardens in the field, and what a grand lot we think they are. After all, they are the men who actually do the sanctuary work, though sanctuary policy and administration are conducted from Audubon House. But if there is anybody who earns his salary in the whole Society, it is the warden in the field. The men earn, too, their repose, and we have always been in favor of their taking it regularly; they've a right to it, and it's nominated in the bond.

Wardens Give Up Vacations

But this year, as vacation time came around, we got a batch of refusals from our South Florida wardens. These letters tell so much, both about the many duties of urgent warden work and about the men who make up this personnel, that we are going to quote some of their replies verbatim:

Warden Parker: "Owing to the fact that we are nearing the storm season, by all means we should stay on the job and take care of your equipment; also, these birds need protection. The young Ibis are coming in here to roost and, if not protected, will certainly be shot. It would be criminal neglect to consider self pleasure above taking care of your equipment and the birds, who seem to place so much confidence in our taking care of them. Don't think I would enjoy a vacation, knowing things here at my post were being neglected."

Warden Eifler: "Don't think we should leave now as we are coming into the hurricane season with the next full moon. We can't leave the Spoonbill tied at the dock as she would pound to pieces and someone has to be aboard to keep her pumped out as she would sink in the rain that we get during a hurricane. Will take the coil and the mag out of the Croc and, if she sinks, it won't hurt her at all; we can have her running in thirty minutes after the storm."

Warden Chandler: "Regards to vacation, I feel I should not take one at present as one State Warden has resigned and another is in the Army. I think if there was ever a time to carry on protection of our wildlife, it is now. I am willing to go ahead and carry on my work as before, and later on in the year or after the war is over I can take a vacation."

Another worthwhile bit from one of Chandler's recent reports: "Checking on airplane flying at low altitude and protecting Crane rookery; cloudy and hot; visited wife and infant daughter in hospital; patrolled prairies, ninety miles covered; hot and sultry." That's the only notice that we received of an addition to his family.

No Convention This Annum Domini

In view of the difficulties of transportation, the drawbacks of night meetings, and the feeling of everyone that it is unpatriotic to travel except on urgent business, or to expend time



Suet is the epicurean delight of all chickadees in winter.

Roger Tory Peterson

and money on personal gratifications, we have decided to hold no members' convention this year. We do hope that it may be feasible to stage a members' field trip at the height of the bird migration next spring, and we'll propose it, if war conditions warrant, later on. But the delightful, regular, annual get-together is simply not in the spirit of the times this year.

However, a business meeting in October there must be. Notices will be sent out, with proxy votes to cast, for the election of directors to serve for the next three-year period; so that, even if you cannot come, you can exert your democratic privilege of choosing your directors with confidence that all the candidates selected by the nominating committee have your interests and those of wildlife at heart.

The annual members' business meeting will be held, as called for in the by-laws, on Tuesday morning, October 20, at 9:30 A.M., with due notice going to all members about October first. But the high-jinks of past conventions simply cannot be staged this year, and perhaps will not be until Hirohito commits hara-kiri on the grave of Hitler.

Season and Census Takers Needed

With the war calling away many of our regular contributors to the Season reports and Christmas and Nesting Bird Censuses, there is a definite need, if our records are not to be filled with holes that will later be beyond patching, for new volunteers to do this work. Women, men beyond military age, and students below it, could all greatly assist us by volunteering to this office.

We desire, of course, to have the work done by those who will be able to continue it for a time at least. For the greatest value of this type of birdspotting consists in repetition of the count, over essentially the same ground, by the same observers. The purpose of the project is not to set records, but to keep accounts; the worth of the job is largely comparative, year in, year out.

We are confident that there is a great deal of trustworthy talent for this type of work that has not yet come forward because such people felt the job was being done by those long qualified. But times are changing. If you want the bird life of your region to be adequately represented in our permanent records, it's up to you.

But do not fail to read the following:

Restrictions for Bird Watchers

The newspapers continue to bring word of further restricted zones and fresh restrictive rules to behavior along the coasts; inevitably these affect bird watchers. In particular, the Army and Navy insist that between sunset and sunrise no civilian may approach closer than 100 yards to the ocean front along most of the Atlantic coast-line. Even in daytime, you may not comb the beaches with cameras or field glasses, at least not without special authorization.

In the New York area there are six such restricted zones. The entire extreme south shore of Long Island, from Montauk Point to Jones Beach State Park (except for the corporate limits of certain seaside towns) is thus restricted. Most of the open coast of New Jersey, from Sandy Hook to Cape May, are similarly out-of-bounds for the ornithologist armed with glasses and camera, excepting a few of the seaside resorts. No part of the Connecticut shore fronting Long Island sound is covered by these restrictions, however.

To gain permission to visit the

coasts and inland waterways for the purposes of observing wildlife and photographing, one should first provide oneself with an identification card issued by the Coast Guard. The nearest Coast Guard station or office is able to issue such cards. The applicant must secure the signature of his employer or other responsible person, who testifies to the applicant's character. The applicant must then passport-size photosecure three graphs, and present his birth certificate or other legal proof of citizenship, and appear at the Coast Guard station or office to be finger-printed. Even so, permission to use glasses and camera in the restricted zone might be refused at discretion by the military authorities.

Rallying Round the Flag

The war, inevitably, continues to demand its sacrifices on an increasing scale. And not unnaturally its greatest demands upon the National Audubon Society are made upon what is most precious to us—the members of the staff. The next to leave us for the colors is Warden Nick Schexnayder of the Rainey Sanctuary in Louisiana. Nick has been with us for sixteen years and we regret, on the selfish score, his going; we hope he'll soon be back.

Arrangements have accordingly been made to bring up Warden John Larson from Texas, where since 1928 he has been primarily responsible for protecting the nesting birds at Green Island in the Laguna Madre. He stays right on that island from the time the nesting birds begin to arrive, in early March, until they begin to wander away in September. The balance of the year he is on tour in "the Valley"—the lower tier of counties near the mouth of the Rio Grande, where he

not only protects the concentrations of winter birds in that almost tropical area, but works hard on Audubon education, speaking to meetings of sportsmen and nature organizations.

He will continue to guard Green Island, in season, since that spot is too strategic to give up even temporarily, and is a regular sanctuary; the rest of the time he will be with the wintering waterfowl of Rainey, until better days return and we can again have a full complement of wardens.

We Aim to Please

We supposed that visitors to the Roosevelt Sanctuary at Oyster Bay. Long Island, and at the enlarged Witmer Stone Wildlife Sanctuary, way down at Cape May Point, New Jersey, would fall off in numbers, due to wartime restrictions on rubber, gasoline and transportation. Yet there are just as many clamoring at the gates as ever. This means more than successful and attractive sanctuaries - though we would be pleased enough if that were all this attendance signified-it must be that the visitors quietly but profoundly approve of the whole sanctuary movement. It is noticeable that none of the visitors ever seem to question the propriety of the Society's steadfast maintenance of its sanctuaries and its whole program of activities. They seem to take it for granted that the National Audubon Society should not falter in its announced intentions, even at times when the existence of the nation is at stake and every penny must be stretched both in the purchase of war bonds and in gen-That our membereral economy. ship, and our friends, should feel as we do about our intention to hold every front as long as we can is a source of deep gratification to us, as we strive to direct NAS policies on

lines that seem to us the only right course.

Cutting Costs While Gaining Assets

In tune with the economy trend we have been able to cut down our budgeted expenditures by \$43,000, or over 18 per cent from the comparable figures of the last fiscal year. All our members will receive the financial statement for the past year, as of June 30, 1942, with covering comment designed to make it very clear.

To the accompaniment of dark hints, there has been criticism levelled against us for not publishing the last financial statement in this magazine. We are glad to have this evidence of interest in such matters; the place of publication of the annual statement has simply been changed from the magazine to direct circulation among those who contribute, by membership, to our support.

In summary of the forthcoming statement, it can be said here, however, that in spite of a deficit in operations for the past fiscal year, and losses on securities sold, we were still able to show a net increase in assets, prior to the setting up of reserves, of \$292,678.

Casualties of Submarine Warfare

If there is any place where we are still losing the war, it is probably in our coastwise shipping, where the torpedoing of oil tankers happens with sickening frequency. Just how serious it is to the birds has been a matter of conjecture. We are grateful, therefore, to James Silver, Regional Director of the Fish and Wildlife Service at Atlanta, Georgia, for a careful compilation of such facts as he has been able to secure by addressing a memorandum to a number of Wildlife Ser-

vice project leaders stationed along the Atlantic and Gulf Coasts.

In summary of two spring months (March-April): The loss reached a peak from Norfolk, Virginia, south to below Hatteras, especially around the memorable Kitty Hawk (where the first successful airplane flight was made in 1902). Losses were "spotty" south of Hatteras to Key West; and the entire Gulf Coast, in those months, had none. All told, Mr. Silver estimates, some 14,600 birds in those two months were killed by oil from the Capes of Virginia southward. The casualties break down as follows: 1373 Common Loons; 103 Scoters: 101 Cormorants: 64 Horned Grebes: 11 Pelicans; 10 Gannets; 6 Great White Herons and 6 gulls; 5 Red-throated Loons: and one each of Ward's Heron. Foster's Tern, and Roseate Spoonbill.

"It is, of course, extremely fortunate," comments Mr. Silver, "for the birds that much of the oil released along the Atlantic and Gulf Coasts took place after the spring migration of most of the birds that feed or rest offshore, primarily waterfowl, which are most vulnerable to oil."

This is War: Shooting on the Toboggan

Never before in American history has hunting, for direct or indirect reasons, declined so rapidly as this season. An all-out war between members of the human species is hardly the way we hoped to get a respite for wildlife, but how things work out to that effect is told in a news flash from former Warden Karcher, now devoting full time to recruiting work for the Coast Guard in Florida. In August he wrote us: "All of the fish houses are closed down and only a few of the old-timers left, and I believe the area will be completely vacated by the last



An Australian "Physician of the Forest"- the Grey-crowned Babbler, at its bulky, twiggy nest.

A. J. Elliott

of the summer. Everyone is being checked at Royal Palm Park going and coming from Cape Sable. On the Southwest Coast, the Government has taken over practically all the charter boats, and the Coast Guard is maintaining a very heavy patrol. No one is allowed to leave the docks before being photographed and fingerprinted. The wildlife has a great chance of making a big come-back. From Arcadia back east, there seem to be thousands of birds everywhere, and leaving South Bay at Okeechobee about sun-

down I saw great flights of White Ibis flying westward. From there south on Route 26, I would estimate there were at least 50,000 birds feeding in the glades along the banks of the many small drainage canals. I honestly believe this is the largest congregation of birds I have seen away from the nesting or roosting keys."

Champion of Quadrupeds Joins Us

Amid so many losses from our staff, it is gratifying to be able to announce

an acquisition—on October 1st Mr. Wilford Edwin Sanderson will become our specialist on conservation of native mammals. He comes to us from the American Humane Society, where he has long been Director of the Wildlife Department.

Born in Ephratah, Fulton Co., New York State, in 1888, Sanderson has had the training and experience that perfectly fit him for the job in hand. He is a graduate of the New York State College of Forestry and the Yale Forestry School, with a wealth of experience in forestry and lumber business, both in the field, and in statistics and administration. He has been a field naturalist for the New York State Museum, a specialist in wildlife and recreation in private forestry work, and finally one of the most valued members of the staff of the American Humane Society. One of his specialties has been the humane trapping of animals. For it is a fact that must be faced by anyone working for the protection of native quadrupeds, that some of them have to be controlled, at least in special areas and at certain times. Moreover, the fur industry, as a legitimate and active going concern, has also to be reckoned with. Mr. Sanderson has conducted annual humane trapping contests and has been notably successful in obtaining the cooperation of the manufacturers of traps and of the people in the fur business. This could only be accomplished by one with great tact and thorough knowledge of his subject. He has had distinct success in obtaining favorable legislation.

At the present time Mr. Sanderson serves as chairman of some highly important committees—namely, that of Conservation of Land Mammals of the American Mammalogists' Society, of Education and Extension of the New York Chapter of the Izaak Wal-

ton League, and of Wildlife for the New York State Section of American Foresters. These interlocking relations, and his wide friendships, all spell success for him in his assignment with us.

The first of these will be to bring in a report on the present status of American mammals, with recommendations as to the action we should take toward their better conservation. He would then be responsible for carrying out such recommendations as our directors approved. For a long time we've wanted to get more actively into this field, and you have wanted us to do so, we know. We've been waiting for the right man to turn up.

Brotherly Love for Audubon

The value of a museum, to the community in which it is situated, depends in part on the zeal which the museum shows for refreshing its collections and keeping them up to date in the science of exhibition. The Academy of Natural Sciences of Philadelphia is one of the oldest institutions of its kind in America, with a record of glory equal to that of the very tops in the line. And it isn't falling behind, either. For its president, Charles M. B. Cadwalader, undertook four years ago to replace the Academy's antiquated bird hall with a splendid modern gallery which will open to the public in October.

We have had an advance peek at the gallery, and were deeply satisfied with the splendid exhibit of the birds of the world in their natural settings. And to our delight, the hall is named in honor of our patron saint, John James Audubon, the greatest ornithological artist of all time.

It is a matter of private regret, even to living Philadelphians, that their ann

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Crested Flycatcher at the entrance to a bird house made of a cypress knee at the Roosevelt Memorial Sanctuary.

cestors of more than a century ago did not secure to themselves the honor of printing *The Birds of America*. For they might have had it; John James in 1824 came out of the backwoods with a portfolio bulging with the now immortal bird paintings, and in Philadelphia he sought the aid of the brilliant group of scientists that were then located in the cultural capital of the nation. True, he found friends there, Edward Harris of Moorestown, N. J., and Charles Lucien Bonaparte praised his drawings and assisted him in many ways. But Philadelphia was the stronghold of his rival, the illustrious Alexander Wilson; and George Ord and the Peales, as well as Wilson's engraver, cold-shouldered Audubon.

When it came to subscribing for



From Australia comes this picture of an immature male Satin Bower-bird painting its nest with fruit pulp.

P. A. Gilbert

The Birds of America, Philadelphia ranked far behind New York, Boston, and Savannah; but the Academy of Natural Sciences and the American Philosophical Society were among the very first on the list, and from that time to this the Academy has never ceased to honor the man whose first ornithological studies were pursued in southeastern Pennsylvania. Indeed, in 1831 Audubon was elected a member of the Academy and throughout his life he was in frequent touch with it.

Audubon Hall, which will be seen and admired by the members of the American Ornithologists' Union when they hold their annual meeting in Philadelphia, October 12th to 16th, was built with gifts from members and friends of the Academy, as none of the Academy's income is ever used for public exhibitions. It, therefore, represents a labor of love by lovers of Audubon and bird lovers. Among the

exhibits are some outstanding specialties, such as the oceanic birds, and famous extinct species, against superb settings by Virginia Campbell. There are other cases showing the evolution of birds, birds in domestic life, bird conservation and protection, as well as birds arranged geographically. In a separate room will be exhibited the birds found within fifty miles of the hospitable doors of the Academy.

A.O.U. to Cape May

The field trips of the American Ornithologists' Union are social and ornithological affairs looked forward to annually with enthusiasm. The 4:30 P.M. train on Thursday, October 15th, from Philadelphia, will carry to Cape May an array of A.O.U. birders in assorted togs and of assorted temperaments, all hoping that Friday, October 16th, will be a "big day" for migrants at the Witmer Stone Wild-

life Sanctuary, maintained by your Society at Cape May Point. Return will be at 3:55 P.M. on Friday.

On the Notice Board

Month in and month out, the workbenches of Audubon House continue to send forth their continuous stream of high-standard products. For instance, printed research reports on two of our most magnificent and endangered bird species will be ready for distribution in October - the longawaited Roseate Spoonbill story by Bob Allen, and another on the Ivorybilled Woodpecker by Jim Tanner. Beautiful lithographic reproductions of the Red-winged Blackbird and the Rose-breasted Grosbeak, by Roger Tory Peterson are now available from our address, in addition to those of the Blue Jay and Cardinal, copies of which were sent with our compliments to each of our affiliated clubs.

What we need now is a good new motto for the National Audubon Society. We still have our ears to the ground for suggestions. And we are still, as always, interested in new nature writers and artists of high quality. The contents of this magazine are, after all, just as good as the contributors. True, we have not space for every article that comes to us; but no editor opens the mail bag without the ever-renewing hope that a second Audubon or a second Thoreau will pop out of an envelope.

If you aren't a writer or an artist, there is still something you could do, and do over and over, and that is to find new members whom we can invite to join this Society. Don't leave it all to us, please, to discover that future member. If you know of any such person or persons, you can help us in the most practical of all ways, by bringing them into camp.

"The Winnah!"

America is getting used, even inland from the two coasts, to the theory, at least, of war emergencies; the Air Raid Warden on their block drums it into Mr. and Mrs. America at home; they are drilled in the offices where they may be employed, and Junior and Sister go to school with identification tags around their necks, like little pets with their licenses. Certainly there were never before so many persons qualified to restore consciousness to those rendered unconscious. But members of the staff at Audubon House report themselves a bit unprepared for a note that circulated around the office this month, stating that, in the event any visitor or employee becomes difficult to handle during a blackout or air raid, "those responsible on each floor have full authority to knock them out." Staff members wonder which ones will deliver the first K.O. Perhaps some of them are unannounced pugilists; if so, unruly visitors, in case of an air-raid alarm, will be able to boast that they were laid cold for the count by this or that distinguished scientist or artist.

Presumably, however, the sort of person who visits Audubon House would cooperate with every emergency regulation by obeying the orders of those in command on each floor. And it will be a matter of gratification to know that, in case of damage to the building in an air raid, the House is equipped with a sprinkler system, while fire extinguishers, Dietz oil-lanterns, and bags of sand are kept on every floor. The roof, under supreme command of Mr. Orbison, is fitted out with one hundred feet of rubber hose attached to a water line, with adjustable nozzle, a bomb shovel, sand, and a twenty-four-gallon can filled with water. Semper paratus!

IS IT WISE POLICY TO INTRODUCE EXOTIC GAME BIRDS?

By Ralph T. King

CONCLUSION

THE Ring-necked Pheasant populations of the North Central States are reported to be somewhat less than they were a few years back, and their numbers continue to decline in spite of restrictions placed on the hunters. The same thing is true of the Hungarian Partridge populations of the Northwest, Various explanations have been offered for these declines. Some think they have resulted from long continued drought and dust storms, others believe they are caused by severe winters, and still others attribute them to overshooting. It is possible that one or more of these causes working singly or in combination are responsible for the reduction in numbers. It is also possible that the condition as observed is simply the manifestation of the apparently natural law (described in Part II of this series) that governs all successful establishments of species in new areas. According to the best available information the English Sparrow has exhibited the same type of population behavior in this country. The Starling is even now reported to be less of a nuisance than formerly in some localities due to its occurrence in smaller numbers. In the case of these two species, as in the case of the pheasant and the partridge, there are several possible explanations to account for their reduced numbers. It is impossible to state definitely the true cause and, therefore, impossible to rule out the type of population behavior explained above as one of the causes.

Because of this characteristic population response on the part of newly introduced species it is hardly safe to conclude at this early date that exotics are superior to our native species in their ability to maintain high population levels. The biotic potential they first exhibit, that is, their almost amazing ability to reproduce and survive, is apparently a temporary response to new conditions. Their population curves always flatten out at some level below the peak of the curve, but at what point on the curve no one can safely predict. It is certainly unfair to compare the population of a species long resident in an area with the population of a species newly established in that area, especially if in making the comparison it is implied that their success and status as separate populations is to remain the same perma-

There is another important point that should be considered in connec-

IS THERE ROOM IN AMERICAN COVERTS FOR BOTH EXOTIC AND NATIVE GAME BIRDS? THE THEORY, PRACTICE AND RESULTS OF GAME BIRD INTRODUCTIONS IN THIS AND OTHER COUNTRIES HAVE BEEN DISCUSSED IN TWO PREVIOUS INSTALMENTS.

tion with this matter of population behavior. Many of those advocating the introduction of foreign species do so in the belief that these species' populations do not and will not exhibit the cyclic fluctuations characteristic of so many of our most valuable native game species. All of our North American grouse are known to be cyclic, as are also a number of important small game and fur-bearing mammals. Periodically their populations build up to a relatively high point and then drop off to a much lower level. The period of increase is approximately seven to eight years in length, the period of decline is about half as long. The length of a single cycle measured from peak to peak or trough to trough is, on the average, eleven years. The mortality during the cyclic decline is high, averaging as much as ninety per cent in some species. Cyclic game species in North America, therefore, provide good shooting only a few years out of each eleven-year period. It was hoped, and is widely believed, that the introduced species will furnish good shooting each year once they are established.

Exotics may be cyclic, too

It is true that there is no evidence to the effect that either Ring-necked Pheasants or Hungarian Partridges are cyclic in their native habitats; and certainly they showed no signs of cyclic behavior during the first few decades following their introduction on this continent. There are, however, an increasing number of reports from reliable observers during the past few years that make it look very much as though these two species are beginning to exhibit the same cyclic behavior that is so characteristic of our native grouse.

In addition to the economic and biologic considerations thus far discussed it is desirable for the sake of completeness to call attention briefly to the esthetic, scientific, social and psychological considerations involved.

Esthetic considerations

Esthetically we are interested in our native wildlife in its native haunts and wish to preserve on a large scale and for all time as nearly as possible the original complement of these native species. If conservation of quality through management is necessary well and good, but it does not necessarily follow that the conservation of quantity through the introduction of exotics is equally good. Certainly it is not good if it results in changes in quality or entails further losses of native species and natural associations. Leopold(2) in discussing game esthetics clearly states the principles that should govern in this respect in the following words: "But it is not merely a supply of wildlife, in the strictly quantitative sense, that is in question. The conservation movement seeks rather to maintain values in which quality and distribution matter quite as much as quantity. Like most really important things, this conception of quality eludes easy definition . . . The objective of a conservation program for wildlife is: to retain for the average citizen the opportunity to see, hear, admire, enjoy, and use, and the challenge to understand the varied forms of wildlife, indigenous to his region." Importations of foreign species for the purpose of maintaining quality is in this connection as unthinkable as the use of chromium and reinforced concrete in the restoration of Mount Vernon, Importations can neither add to nor aid in maintaining the qualities we are here considering; they can, however, destroy or reduce some of these very qualities.

Scientific considerations

Scientifically we are concerned with the maintaining of our native fauna in as nearly its original condition as possible. This phase of the problem has been so ably presented in papers by other writers that it does not require elaboration here. There is, however, one point that bears so directly on the matter of wildlife conservation and is of such immediate importance in this connection that it is deserving of special emphasis. It is an accepted truth that there can be no real understanding and consequently no logical treatment of an abnormal condition until the normal is known and understood. Our wildlife conservation measures and administrative practices could be better formulated and applied if we knew more of the normal conditions of existence affecting the species we are attempting to conserve. These conditions can be more easily determined and better analyzed in the absence of complicating foreign species.

Social considerations

As for the social considerations involved-our patriotism should make us reluctant to give up hope of maintaining and perpetuating these things native to the continent and associated with our national development. This feeling is exhibited in our regard for battlefields, historic buildings, and other objects of political, military and historical interest. These and many other objects, both man-made and natural, are carefully preserved as a part of our national inheritance and because of their social significance. Shouldn't this same feeling of concern apply as well to native species and natural associations?

It should not be necessary to point out that this implies no opposition to the presence of foreign species on the American scene. The simple fact of the presence of exotics is no great detriment. The problem is not as simple as that. Grange(1) has stated one point-of-view. He says: "We do not believe appreciation either of natives or exotics in any way excludes appreciation of the other. For ourselves, we believe a foreign game bird is still beautiful in America, irrespective of origin. We frankly enjoy these gaudy Asiatic pheasants with their imcomparable loudness of color. We also are very thankful for our superb-flying drab native sharptails . . . Bird personalities are so interesting, so different, that there is room in the heart of sportsmen for them all. No one is going to get us identified either with the native fanatics or the exotic boosters; we simply champion them all and maintain a tent in each camp. Each to its own place in America, and may they all increase!"

The question is not whether there is room in the heart of the American sportsman for both native and exotic species, but rather whether there is room in American coverts for both? The previous discussion has attempted to make clear that there is as yet no definite answer to this question. Every introduction carries with it a certain amount of risk. One of these risks is the loss of those qualities just discussed in connection with social values. The following statement relative to the psychological effects of introductions should make this matter of risks involved still more clear.

Psychological effect

As conservationists we can hardly fail to recognize the fact that faith, blind or otherwise, in the possibilities of accomplished or future introductions engenders a false feeling of security and reduces by that much our efforts to maintain and preserve that



Scientifically we are concerned with the maintaining of our native fauna in as nearly its original condition as possible.

which we already possess. This psychological effect of introductions can develop into one of its most harmful aspects. It leads many to believe that much is being done and there is, therefore, little cause for worry. As a consequence interest in the welfare of native species lags and they suffer accordingly. It may lead to an increase in the numbers of those who feel that it is better to "let the natives go" and fill their places with species "easier to obtain, productive of more sport, and

better adapted to prevailing conditions." Needless to say none of these points is proven, they are, in fact, quite doubtful, and the attitude they express is certainly not conducive to the best kind of conservation.

In concluding I cannot do better than quote the following carefully considered opinions. Rowan⁽⁴⁾ says: "It is by no means a universal law that an imported species must of necessity prove detrimental to some native race, though it is very frequently the case

if rivalry of any sort is involved." Taverner(5) in the same connection points out that "there are undoubtedly forms of life to be found elsewhere in the world that would be valuable acquisitions to this country but the danger of introductions is great and should not be entered upon without careful consideration as to whether the probable advantage is worth the risk." And finally Redington(3), former Chief of the Bureau of Biological Survey, says: "Experience has indicated the desirability, as a general rule, of restocking game ranges with the same species that formerly occurred there, as these are adapted to conditions prevailing and are most likely to thrive. To introduce species foreign to a region, at least without careful consideration of each case by experts with all available knowledge of the factors involved, is to risk results that may prove disastrous . . . The native wildlife of any region is a feature of such recreational and aesthetic as well as economic value that the introduction of too nearly related foreign strains should as a rule be avoided, as they may result in crossing and the production of mixed races devoid of the interest that attaches to pure stocks."

REFERENCES:

- (1)GRANGE, WALLACE. Why Not Eastern Sharptails? Game Breeder and Sportsman, 43, 2, 26-31.
- (2) LEOPOLD, ALDO, Game Management. Charles Scribner's Sons, N. Y.
- (3) REDINGTON, PAUL G. Section on Wildlife in Conservation of our Natural Resources. Van Hise, C. R. and Havemeyer, Loomis. The Macmillan Company, N. Y. 1930.
- (4) ROWAN, WILLIAM. Details of the Release of the Hungarian Partridge (Perdix perdix) in Central Alberta. The Canadian Field-Naturalist, 41, 5, 90-101.
- (5) TAVERNER, P. A. Hungarian Partridge vs. Sharp-tailed Grouse. The Canadian Field-Naturalist, 41, 7, 147-149.

By way of summary it seems that the following tentative conclusions relative to the introduction of exotics may be drawn:

- Economically the introduction of foreign species has been and undoubtedly will continue to be highly expensive.
- 2. The number of well intentioned introductions that have resulted in establishment of the introduced species and have since proven to be non-beneficial if not actually injurious is equally as great as the number that have proven to be desirable.
- 3. Introductions resulting in establishment always create heavier demands on both foods and coverts, may involve the introduction of new parasites and diseases, and may result in cross-breeding to the detriment of closely related native stock. Furthermore such introductions do not necessarily result in reducing the hunting pressure on diminished native species.
- Introductions of additional animals into exhausted or deficient environments can only result in loss of the animals and farther deterioration of the environments.
- Introduced species can and have increased to pest proportions.
- 6. We cannot be sure of the population behavior, food habits and degree of spread of any introduced species until several years after the species has become successfully established.
- Any successful introduction must inevitably change natural associations and the native fauna to some extent. We cannot tell to what extent until the introduced species is established.
- Unfortunately we have not taken advantage of our opportunities and as a consequence have learned relatively little about the costs and results of introductions.



LIVES AROUND US.

By Alan Devoe. Woodcuts by Frank Utpatel. 221 pp. Creative Age Press. \$2.

Reviewed by LEWIS GANNETT

Alan Devoe lives near the point where New York, Massachusetts and Connecticut meet, and he writes of the rhythms of life about his Phudd Hill with a rare combination of the scientific spirit and the sense of mystery. The twenty studies which make up his new book, "Lives Around Us," have, for the most part, grown out of fields and woods that he has known intimately; when he writes of "the heartening constancy of earth" or of "the queer high poetry" of "the commonest earth-incident," he writes of himself as much as of shrews and woodchucks, locusts and cicada, turtles and rattlesnakes.

He knows that one major occupation of all creatures of earth is the killing of other kinds of creatures, that another major occupation is sleeping, and that love may be as

mysterious, and even more important, to a mouthless mayfly as to a man. (Anatole France, he might have recalled, romanticized the butterfly, which does all its sordid eating in its youth and consummates old age with a love as fatal as ecstatic.) So Mr. Devoe writes most intensely of the murderous weasel and the great horned owl, and with an incongruous impatience of man's killing of the passenger pigeon. He is irked, as we all are, by the alien starling, but his own philosophy might have taught him that the history of nature is a succession of unbalances forever being "rectified" by new unbalances. We do well not to worship Nature too blindly; if man ever transcends war, it will be by learning to be profoundly un-natural.

The sense of wonder provides some of the major satisfactions of life, and some of man's most fatuous literature. It is Mr. Devoe's major success that he sets down without banality his profound awareness of mysteries. His chapters on hibernation (that

BOOK REVIEWS BY LEWIS GANNETT, HAROLD E. ANTHONY, JOHN KIERAN, LUDLOW GRISCOM, ALEXANDER SPRUNT, IR., C. A. HARWELL, ROGER TORY PETERSON

Yogi of the beasts), on the nervous system of the tiny shrew, on the long infancy of the cicada, and on the motionless love of the snail, are among his best. I like him least when his text suggests booklore rather than Phudd Hill lore. I doubt that he has ever seen martens, lynxes or bears near Phudd Hill, or even their tracks; and it is a long time since a New York State wild turkey attacked a rattlesnake.

FADING TRAILS

The Story of Endangered American Wildlife. Prepared by a Committee of the United States Department of the Interior, National Park Service, Fish and Wildlife Service. 279 pp. With 36 illustrations. The Macmillan Company. \$3.00.

Reviewed by HAROLD E. ANTHONY

This book is certain of serious consideration by all who are interested in conservation. But "Fading Trails" is considerably more than the conventional sermon on conservation and should prove valuable in winning converts to the cause.

A series of articles by different authors, this book is so well edited that the presentation and continuity of ideas leaves little cause for criticism. The writers know their subjects and the result is an expression of the best thought covering a large field. The 31 chapters treat of mammals, birds, fishes and other animals as well as an introductory background and a conclusion.

We learn something of the faunal riches of our continent when the early explorers marveled at what the New World had to offer; we note the heavy toll of man's occupation upon the wild life about him; we see the awakening consciousness to prodigal wasting of natural resources, and we agree with the authors that the trails are truly "fading."

Here is an entertaining account of the history of threatened species, interesting observations on habits, an analysis of the causes of extinction, and the conservation measures to check them. The selection of animals takes the reader from coast to coast, from Puerto Rico to the Hawaiian Islands, from the tropics to Alaska and the Barren Grounds.

Well illustrated, the book has four color plates, 20 halftones and 12 line cuts. The artist, Walter A. Weber, has been very successful in delineating those details which give character to the subject.

"Fading Trails" is not a "one reading" book, it will be a useful reference and a good book to keep in a library. The selected bibliography should prove helpful to many readers.

This reviewer recommends "Fading Trails" without reservations.

REPRESENTATIVE NORTH AMERICAN FRESH-WATER FISHES.

By John T. Nichols. 128 pp. Colored plates. The Macmillan Company. \$1.25.

Reviewed by JOHN KIERAN

This reviewer knows enough about John T. Nichols to take his word for anything that swims in the brooks, ponds, streams, rivers and the Seven Seas. He is the Curator of Recent Fishes at the American Museum of Natural History and, to distinguish him from others by the name of Nichols who have worked or visited in those halls, he is admiringly known as "Big Nichols." He is, indeed, "as tall a man as any's in Illyria." He is a very fine field-ornithologist and has

other good qualities, but this time he stuck to his specialty and has come out with one of those limp-covered, pocket-edition handbooks with colored plates of fishes he has met, with descriptive notes and family gossip.

Undoubtedly the reader knows the type of book since there has been no shortage of such works on birds, flowers, butterflies and trees. The fish book is like that except that, to this reviewer, the pure reading matter contained therein is much better than the text ordinarily found in such works. John T. Nichols not only knows his fishes, but he puts his information in such luring style that the reader is hooked from the start and will go on to read enthusiastically about fishes he never saw in the water or under egg sauce.

Not knowing many of the fishes depicted, this reviewer is no competent judge of the accuracy of the color plates. But if they passed the inspection of John T. Nichols, they must be good. The only plate that didn't seem quite up to the wild product in nature is the one of the Eastern Brook Trout (Salvelinus fontinalis)-which isn't a trout at all but a char, as Mr. Nichols explains. This carping criticism of one plate probably is due to a firm belief that no artist ever can paint the full beauty of that fish coming fresh out of the white water in a rushing brook.

BIRDS AROUND NEW YORK CITY

By Allan D. Cruickshank. With 36 full page illustrations. 489 pages. American Museum of Natural History, Handbook No. 13. \$1.75.

Reviewed by Ludlow Griscom

This handbook replaces the reviewer's book of 1923, now out of date due to the change in status of many birds, thanks to the effects of conservation, and the data from greatly increased field work.

To those of us who have known that this book was in preparation, the finished product has surely exceeded any reasonable hopes entertained in advance.

The author properly reflects the greatly increased data available to him, while his major contribution has been to point out how vague are the life zones in the New York City region, how little the distribution of birds locally can be ascribed to this principle, and how much more surely it is, in most cases, an ecological problem. Fifteen "major ecological blocks" are recognized, with charts listing the dominant and subdominant birds in summer, spring, fall and winter. This should stimulate observers to make accurate studies along lines where research is badly needed. As the decades roll by, the outside dates for more and more species will approximate January 1-December 31, but their normal migration period will remain the same, and we already know what it is. But as Mr. Cruikshank points out in an excellent discussion. we do not know why the Swamp Sparrow is lacking from many freshwater marshes on Long Island, nor have we worked out the innumerable complications which arise when large areas have become disturbance communities.

Since 1921, in the Northeast, birds have increased by leaps and bounds, and many water birds have regained the losses of fifty years. Many birds, also, have extended their breeding ranges northward and eastward. The author has noted these changes in the annotated list, but I regret the omission of a summary of these changes in the Introduction.

The annotated list of species ad-

mirably reflects the cumulative results of the modern decades of intensive and expert observation and field work. Gone are the now unnecessary discussions of diagnostic field marks; gone are most of the detailed citations of records of rarities. The author has shown admirable judgment in deciding knotty questions of policy. I like his emphasis on the normal and the usual, and his warning to beginners, not to expect a rarity every year, just because a ninety-year grand total by hundreds of observers seems large.

In attempting to solve the difficult problem of giving a precise statement of the status of a species in a given locality, Mr. Cruickshank selects as his unit of measure, the maximum number to be seen in one full day's birding by an expert in the best country; and for rarer species, the number to be expected per season, year or decade. How much clearer this is than such relative terms as "common," "fairly common," or "uncommon," or the more complicated system of 0.64 of a bird per trip as compared with 0.53!

The author must have examined a fabulous number of sight records, since the book is based 99 per cent on sight records and one per cent on specimens collected, yet he fails to state any principle of validity for sight records. In the case of a few freak migration dates, which are almost incredible, and unsupported by analogous dates in any adjacent area, he might have better excluded them, as this is as sound a basis for exclusion as any I know. His judgment in the case of rare stragglers is excellent, however.

Systematic ornithologists might quarrel with the author's neglect of a few subspecies. The 1931 A.O.U. Check-List recognizes various subspecies not considered in Griscom's book, because not in the 1912 edition. Where systematic studies have been made of New York collections, the subspecific identification is usually included, but there are many open questions, apparently ignored. It is common sense, for instance, that the Newfoundland Yellow Warbler and Willow Thrush (the Newfoundland population) must migrate regularly through the New York region. Had local collections been examined, they might have revealed specimens of record.

The reviewer admits strong bias as the subject has been a life-long interest, and the author a warm friend of many years standing. He must be congratulated on a difficult and wearisome task most worthily concluded, and I have been hard put to it to find a few minor criticisms.

This volume should be in the hands of all serious students of birds of the eastern United States, and as a model must be consulted by all persons preparing similar faunistic studies. It sets a new standard for such studies, and I would not hesitate shamelessly to imitate its many excellent features.

THE BIRDS OF NORTH CAROLINA

By T. Gilbert Pearson and C. S. and H. H. Brimley. 416 pp. With 177 illustrations, 20 in color. North Carolina Department of Agriculture, Raleigh. \$3.50.

Reviewed by Alexander Sprunt, Jr.

Anticipation so often exceeds realization that, when the reverse occurs, it amounts to an occasion! Announced some months ago, the revised edition of "The Birds of North Carolina" has been eagerly awaited by many, and abundantly justifies the high expecta-

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tions held for it, for it is both readable and informative.

The authors, household names to this country's bird students, are as inseparable from the "Old North State" as the Wright Brothers first flight or the Mecklenburg Declaration of Independence! Dr. Pearson and the Brimleys have done a splendid piece of field and research work and the result will take its place among the ever growing list of titles which is furthering the march of ornithology in the twentieth century.

North Carolina topography is more diverse than that of any other eastern state, with an elevation which varies from sea-level to the highest point east of the Mississippi River (Mt. Mitchell, 6684 feet). Consequently, the avian population is exceedingly varied, with such startling contrasts as nesting Anhingas and Red-breasted Nuthatches. Ocean beaches, coastal plain, sand-hill region, Piedmont and high mountains all hold their peculiar avian forms, and are carefully considered in this book.

We find the history of North Carolina ornithology, which dates from 1584, accurately and attractively presented. References are well-treated and the bibliography is impressive. That the authors have checked records carefully is obvious, although some may hold different opinions from those expressed regarding the identification of certain forms.

Much material of the former edition has been used, but there is a wealth of new information and data which students will find invaluable. The table of migration in the Raleigh region, a careful record of fifty-seven years of observation, is a case in point. This volume, with 416 pages dealing with 396 species and sub-species, enlarges the scope of the 1919 edition, which contained only 380 pages and

342 species and sub-species. Thus, more than two birds a year have been added to the state list for every one of the twenty-three years which have elapsed since the publication of the former volume. This speaks well for the activity of the observers. It is probably impossible to produce a book of this kind and avoid mistakes; they are at a minimum, however, and not serious.

The illustrations are largely reminiscent of the 1919 book but have been considerably augumented by 4 color plates and 34 black and white drawings from the brush and pen of Roger Tory Peterson, a contribution of noteworthy value.

Although this is the most thoroughly illustrated book on birds south of the Mason-Dixon Line, I wish that the authors had pointed out, in their preface, the usefulness of two other important books on birds of this region: "The Birds of South Carolina," by Arthur T. Wayne, published in 1910, and "The Birds of Virginia," by Harold H. Bailey, published in 1913.

Sponsors of the volume express the opinion that "there will not be another book on this subject for many years," a belief shared by this reviewer. Such being the case, a card index of owners is desired so that they may be furnished with "new information" from time to time on the birds of the state. This is an unique proposition in regard to a state bird book and one which every owner should take advantage of.

MUSIC IN NATURE

By Dr. Loye Miller. Four doubledisc phonograph records. University Press, Berkeley, Calif. \$4.00.

Reviewed by C. A. HARWELL

For years I have been enjoying the bird song records of Gorst, Avis and Kellogg, and more recently, the North American Bird Songs recorded by the Albert R. Brand Bird Song Foundation. Now there has just become available a popular lecture on "Music in Nature," based on material which the recorder has presented to his classes at the University of California at Los Angeles, where he is Professor of Biology. I think of these recordings as a "spoken book," the seven chapters being represented by seven of the eight sides of the four discs.

Do birds sing, or are they talking? What is speech and song in our own efforts? Is there one language for all birds? Do birds have ideas? Do birds whistle? Do birds have absolute pitch? Loye Miller raises and then answers all these often asked questions and many more. He makes his points clear by illustrating from nature. With modesty becoming a great scientist, he apologizes for his imitations, but according to my ear and memory, his imitations are very well done.

Of the 46 songs and calls of animals which are given on the records, 39 are birds. Among these are owls, Meadowlark, dove, Canyon Wren, creeper, chickadee, Yellowthroat and Ruby-crowned Kinglet. Among the other animal calls are those of frog, cricket, chipmunk and ground squirrel, which are introduced in order to help make clear the discussions of pitch, rhythm, interval, timbre, pattern and purpose.

Here is a set of records intended to afford pleasure and spiritual uplift, to increase appreciation, and to aid the field student in identifying animal sounds. They should find wide use with schools and clubs interested in nature. They offer a complete program of 35 minutes exactly suited to

bird study groups.

NESTING BIRDS AND THE VEG-ETATION SUBSTRATE.

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By William J. Beecher. 69 pp. Islustrated with tables, diagrams and maps. Chicago Ornithological Society, Chicago. \$1.00.

Reviewed by Roger T. Peterson

This is a new idea in ornithological publications, a "dressed-up" paper, well bound between attractive covers, and properly illustrated. The hope of both author and publisher is that the interesting format will assure this very important piece of ecological work the broad distribution it deserves. The result of five years' work on a 482-acre tract of marsh and upland near Fox Lake, Illinois, it attempts to iron out some of the "bugs" in the study of breeding bird populations, with particular emphasis on the effects of the "edge." Whereas most nesting studies use the singing male as the key to the numbers of bird populations, Mr. Beecher has striven for more exact results by actual discovery of nests. In the year 1937, on which this report chiefly depends, more than 1200 nests were located-over 85% of all the nests on this large area. To anyone who has spent much time making breeding bird counts, this represents a prodigious amount of work.

In the annotated list of birds the author has presented each species in relation to the specific environment in which it is found. The bird populations, when correlated with the amount of "edge," brings the author to the conclusion that "the population density of most nesting birds varies as a direct function of the amount of edge per unit area."

In reviewing breeding bird distribution, the author shows that many factors may be of limiting importance, but he concludes that "the vegetation substrate is the prime determiner, inasmuch as birds have inherited nest patterns as well as ancestral habitats which, within limits, predetermine the plant type in which they will nest." The limiting value of habitat selection, competition, predation, food and climate is considered. There is an interesting analysis of changes imposed by settlement wherein it is revealed that a greater number of individuals of many species exist within the area today, and only a few specialized and unadaptable ones have disappeared. This scholarly study is one no ecologist or conservationist should miss, and should prove to be a valuable addition to any library.

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The Changing Seasons



By Ludlow Griscom

CLIMATIC conditions were remarkably variable in the United States during the past June and July, and it is difficult to make generalizations. Temperatures were about normal in the Northeast, very hot in most of the South, warm to hot around the Great Lakes, cool in the Northwest, where high wind and hailstorms caused some local loss of nests and actual injury to birds. June was rainy, July was very rainy, and heavy July rains are reported from Massachusetts, New York, Philadelphia, Florida, Minnesota and Texas.

The success of the breeding season for most groups of birds is often quite affected by the incidence of rains, especially if in combination with cold weather. No such conditions prevailed in June this year, and the breeding season is generally reported as good, and early in those sections of the country which had a very early spring migration. In Texas particularly variable conditions produced variable results; the first breeding season in April and May was poor; those birds which tried again in June did very well, but a wet July caused the failure of second broods that month. The coastal rookeries, however, broke all records for success. In the important Dakota refuge areas, Mr. Henry's summary states that wildlife conditions are generally as good as when the white man first came. Could anyone imagine a better tribute

to our national wildlife program, its leaders and corps of assistants?

In California a very cool and unfavorable spring changed to more favorable and warmer weather. There was much late and successful nesting near San Francisco, and the outlook is favorable for a good fall crop of seeds and fruits. These climatic features increased progressively southward, so that southern California had a normal June, and a warm July, ending with very desiccated conditions.

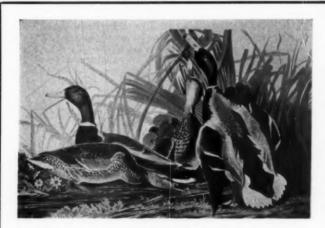
A few of the more interesting changes and records are noted below. Lawrence's Warbler bred in Massachusetts and Chicago. Winter Wrens increased in the Northeast, but the Short-billed Marsh Wren is still way below the pre-1940 freeze par, and actually decreased around New York. The Long Island Skimmer colony was abandoned this year, and this perhaps for four strays on Cape Cod in late June and early July, as there were no storms. It is not generally known that Champlain found a large Skimmer colony at Nauset, Cape Cod, in 1605; people I know have placed bets on how many years it will take for the Skimmer to nest once more in Massachusetts. The Great Blackbacked Gull bred on Long Island. and North Carolina reports several summering birds; I can remember when there was not even a winter record for the State. The Prairee Horned Lark continues its "boom"

in the Atlantic States, with increases in southern New Jersey and North Carolina. Out in the Dakotas; the White Pelican increased, the Canada Goose increased on three refuges, and the upland game birds have shown a spectacular increase. The Gadwell bred in North Carolina.

There were very few late spring land bird stragglers in the North and Northeast, but many are reported from North Carolina and eastern Texas. A freak straggler was a Parasitic Jaeger on a lake in Youngstown, Ohio, July 4!

The fall migration started very early with all groups of birds. The first shore birds reached Massachusetts in late June; Long Island, July 1st; Florida and Texas, mid-July; and the coast of California, early in the month. Fourteen species of shore

birds were on Cape Cod July 5, and species like the Dowitcher and Lesser Yellowlegs reached their peak July This group was abundant in Northern California by mid-July and common in southern Texas by the end of the month. Hudsonian Godwits were six weeks early on Cape Cod. In California we learn of a Lesser Yellowlegs and some Knots, July 12; 200 Northern Phalaropes on July 12 is a date which cannot be matched on the Atlantic side of the continent, nor can observers in the Northeast hope to see 1,000 Curlew on any one day. Terns and Gulls began moving south early in July on both coasts. Reports from Massachusetts, North Carolina, Florida, Texas and California suggest the beginnings of a phenomenally early land bird migration.



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